



Public Health

in affiliation with



Riverside County Public Health
COVID-19 Needs Assessment

An Analysis of Race and Ethnicity

July 2022

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ACKNOWLEDGEMENTS

HARC would like to thank the Riverside University Health System – Public Health staff who worked on this project, presented here in alphabetical order by last name:

- Erin Curlee
- Wendy Hetherington
- Dianne Leibrandt
- Kevin Meconis
- Ryan Natividad
- Caitlin Storm

This project was supported by Epidemiology and Laboratory Capacity Enhancing Detection funds, which expands upon previous COVID-19 awards and is provided by the Centers for Disease Control and Prevention by way of the Paycheck Protection Program and Health Care Enhancement Act Response Activities for Cross-Cutting Emerging Issues. These funds provide critical resources to local health departments in support of a broad range of COVID-19/SARS-CoV-2 testing and epidemiologic surveillance related activities, including the establishment of modernized public health surveillance systems.

HARC would also like to thank Ace Printing for their hard work mailing out surveys and post-incentives, especially Mark Lawrence and Sandy Miller. Visit <http://www.aceprintingps.com/> to do business with them.

HARC would also like to thank our volunteers and interns who worked on the project, including Braden Hinely, Joaquin Ramos, and Veena Reddy.

HARC would also like to thank Andrea Tovar for reviewing and editing this report.

HARC would also like to thank our statistician, Brian Kriz, for weighting the data to ensure that the data adequately represented Riverside County.

Finally, HARC would like to thank the Riverside County residents who took the time to respond to the survey. Without them, this knowledge would not have come to fruition.

EXECUTIVE SUMMARY

Introduction

The purpose of this report is to provide the results of a county-wide needs assessment by racial/ethnic category. The report looks at five racial/ethnic categories, listed in order of the largest to the smallest: Hispanic/Latinx, White, Asian American/Asian, African American/Black, and "other."

Established in 1926, the Riverside University Health System – Public Health (RUHS – Public Health) is the local public agency responsible for ensuring the health and well-being of county residents and visitors in service of the well-being of the community. HARC, Inc. (Health Assessment and Research for Communities) is a nonprofit research and evaluation organization based in Riverside County. HARC advances the quality of life by helping community leaders use objective research and analysis to turn data into action. RUHS – Public Health and HARC partnered to produce this report, as well as a series of other reports to understand the impact of COVID-19.

Methods

Ace Printing purchased a random sample of 40,000 households in Riverside County. HARC and Ace Printing mailed an "invitation package" to all 40,000 households, which included a cover letter (in English and Spanish), a paper survey in English, a paper survey in Spanish, a pre-paid return envelope, and a \$2 bill as a pre-incentive. Each survey was printed with a unique identifier code so that each household could only participate once.

Results

Demographics from the surveys were approximately similar to Riverside County demographics; however, there were some slight biases toward older and White-identifying individuals. Thus, the survey results were weighted to account for these demographic differences to provide a more representative illustration of the county.

The results from a total of 9,144 surveys are included in this report. When weighted, these 9,144 surveys represent 1.8 million adult residents. The racial categories "American Indian/Alaska Native," "Native Hawaiian/Pacific Islander," "Multiracial/more than one race," and "other" did not each have a sufficient non-Hispanic sample size to be included in these custom analyses. Rather than excluding these samples, non-Hispanic residents from these four racial categories were combined into the single category of non-Hispanic "other."

Demographics

The largest racial/ethnic group in Riverside County is Hispanic/Latinx (45.6%), followed by White (36.6%), Asian American/Asian (7.4%), African American/Black (6.2%), and “other” (4.3%). Among Hispanic/Latinx residents, 84.1% took an English-language survey, and 15.9% took a Spanish-language survey.

COVID-19 Attitudes and Behaviors

The social and behavioral effects of COVID-19 were measured in five domains: impacts on daily life (work/school, relationships, etc.), negative subjective experiences (anxiety, boredom, etc.), lifestyle changes (buying food on a larger scale, etc.), difficult life experiences (job loss, problems with housing, etc.), and delays/absences of healthcare.

For impacts on daily life, work/school participation and social life or relationships were the most impacted across racial/ethnic groups. Nonetheless, there were disparities. For example, communities of color were significantly more likely to experience great impacts on their economic situation, mental health, physical health, and work/school participation compared to White residents.

For negative subjective experiences due to COVID-19, Asian American/Asian residents were significantly more likely to select “fear of getting sick” than were all the other racial/ethnic groups. For delays/absences of healthcare due to COVID-19, Hispanic/Latinx and Asian American/Asian residents were significantly more likely to report delays in getting medical care and mental healthcare than were White residents. There were no significant differences among racial/ethnic groups in reporting delays in getting dental care.

COVID-19 Diagnosis and Treatment

Hispanic/Latinx residents (69.2%) were significantly more likely to report having tested positive for COVID-19 than were all other racial/ethnic groups.

COVID-19 Vaccine

Asian American/Asian (93.6%) and White residents (86.5%) were significantly more likely to be fully vaccinated than all other racial/ethnic groups.

For the reasons why someone was not vaccinated, there was a significantly higher percentage of White residents (43.8%) who said they do not trust the government compared to Hispanic/Latinx residents (26.6%).

For beliefs on vaccine efficacy, a significantly higher percentage of Asian American/Asian (65.1%), White (61.0%), African American/Black residents (60.1%) said the vaccine would protect them “very much,” compared to Hispanic/Latinx (51.3%) and “other” residents (45.6%).

For COVID-19 recommendations, Asian American/Asian (73.5%) and White residents (69.0%) were significantly more likely to be “extremely likely” to recommend the vaccine than were Hispanic/Latinx (64.3%) and “other” residents (58.0%).

Disproportionate Impact of COVID-19 on Communities of Color

Residents were asked about their views on COVID-19’s disproportionate impacts on communities of color. African American/Black residents (52.7%) were significantly more likely to “strongly agree” that people of color face disproportionate health and economic impacts than were residents of all other racial/ethnic groups. Further, Asian American/Asian residents (7.5%) were significantly more likely to “somewhat disagree” than were White (4.1%) and Hispanic/Latinx residents (2.9%).

COVID-19 Information Seeking

Residents were asked how well they trust information from members of their community. Asian American/Asian residents (19.8%) were significantly more likely to respond that they trust their community members “very,” compared to White (12.9%), Hispanic/Latinx (12.6%), and African American/Black residents (10.8%).

COVID-19 Resources Accessed

Residents were asked what resources they have accessed during the pandemic. Across all racial/ethnic groups, over 70.0% of residents accessed stimulus checks. In addition, Hispanic/Latinx and African American/Black residents were significantly more likely to report receiving utility bill discounts, rent deferral or forgiveness, and food bank/food pantry/delivered meals than were White residents.

Knowledge of Public Health Efforts During COVID-19

Several significant differences were present regarding residents’ knowledge of RUHS – Public Health’s pandemic efforts. A significantly higher percentage of Hispanic/Latinx residents (35.7%) were unaware and would have liked to have known about mask distribution compared to “other” (23.0%) and White residents (17.1%). In addition, a significantly *lower* percentage of White residents were unaware and would have liked to have known about food assistance/Great Plates Program, childcare assistance, educational

information and videos, and the giving of information to support small businesses, compared to residents from all other racial/ethnic groups.

Conclusion

As these results show, residents have been impacted by COVID-19 across racial/ethnic groups, but disparities nonetheless arise in COVID-19 social impacts, diagnosis, vaccination, and attitudes toward information seeking. There were also disparities found in resource access and knowledge of resources.

The picture painted by this report is a familiar one of disproportionate health and social impacts on communities of color. The report provides clear evidence of a strong need for public outreach in Hispanic/Latinx, Asian American/Asian, African American/Black, and “other” communities of color.

However, while non-White residents often were significantly more likely to report great impacts, some non-White groups had disproportionate positive outcomes. For example, Asian American/Asian residents were more likely to trust their community members “very” than were White, Hispanic/Latinx, and African American/Black residents, and Asian American/Asian residents had the highest vaccination rate (93.6%) among all groups. One possible explanation for these types of outcomes is socio-economic class. Among the general U.S. population, Asian American/Asian residents are more likely to have higher educational attainment and income than other groups. This explanation would fit other evidence: in other contexts, class has proven to be a driver of COVID-19 outcomes. Further analyses would be necessary to determine the relationship between race/ethnicity and socio-economic class in Riverside County.

Two conclusions emerge: the pressing need for public outreach to communities of color and the possibility for further analyses on the role of socio-economic class in COVID-19 impacts in the county.

INTRODUCTION

The purpose of this report is to provide the results of a county-wide COVID-19 needs assessment by race and ethnicity. There are five racial/ethnic categories used in this report listed in order of the largest to the smallest: Hispanic/Latinx; not Hispanic, White alone (referred to as White); not Hispanic, African American/Black alone (referred to as African American/Black); not Hispanic, Asian American/Asian alone (referred to as Asian American/Asian); and not Hispanic, other (referred to as “other”).

For brevity, detailed methods and appendices have been removed from this report, and only the most pertinent pieces of information remain. The initial report includes comprehensive analyses and information regarding survey development, sampling protocol and timeframes, and data weighting. If desired, please contact Riverside University Health System – Public Health (referred to as RUHS – Public Health) or HARC for a copy of the initial report.

This report is a custom analysis of data collected from a county-wide study measuring COVID-19 attitudes and health needs. This project was supported by Epidemiology and Laboratory Capacity Enhancing Detection funds, which expands upon previous COVID-19 awards and is provided by the Centers for Disease Control and Prevention by way of the Paycheck Protection Program and Health Care Enhancement Act Response Activities for Cross-Cutting Emerging Issues. The present report was developed by HARC, Inc., on behalf of RUHS – Public Health.

About RUHS – Public Health

Established in 1926, RUHS – Public Health is the local public agency responsible for ensuring the health and well-being of county residents and visitors in service of the well-being of the community. RUHS – Public Health’s values of respect, integrity, service, and excellence are demonstrated through their strong partnerships with community-based organizations, academic institutions, tribal organizations, faith-based organizations, local governmental agencies and community leaders, local business, social service providers, nongovernmental organizations, and other relevant partner organizations necessary to improving the health and well-being of Riverside County’s community.

About HARC

HARC, Inc. (Health Assessment and Research for Communities) is a nonprofit research and evaluation organization based in Riverside County. HARC advances the quality of life by helping community leaders and residents use objective research and analysis to turn data

into action. HARC specializes in providing data that helps improve the social determinants of health.

Racial/Ethnic Categories

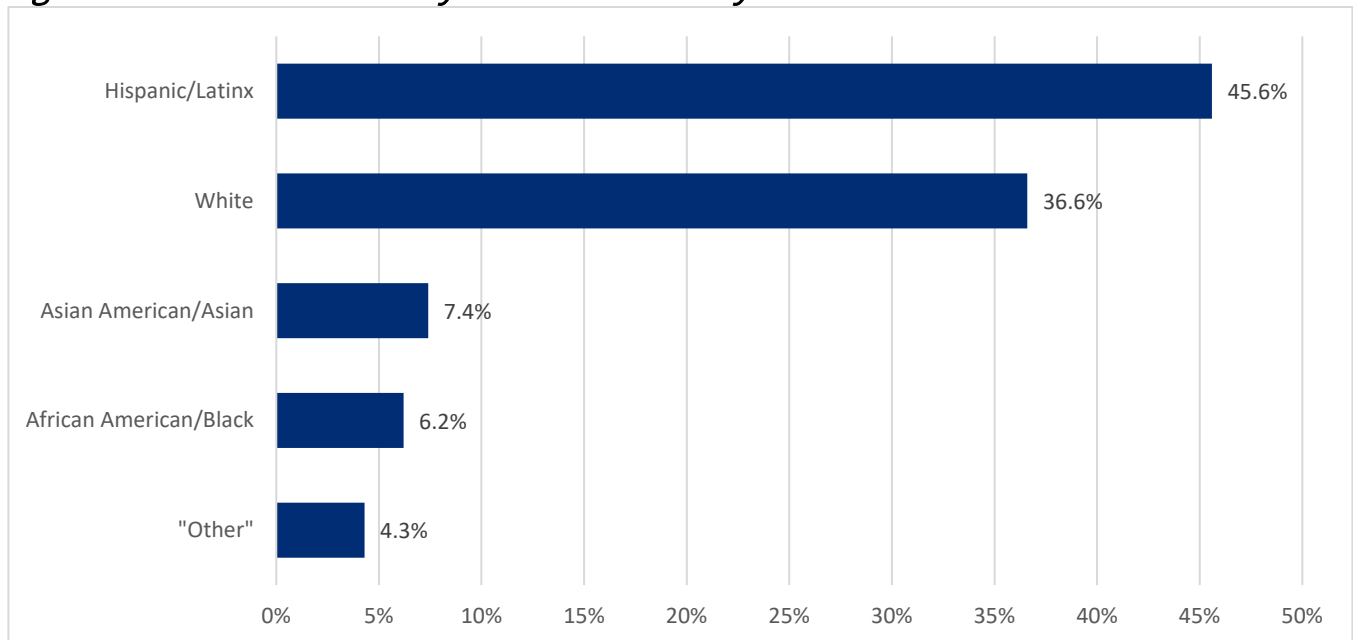
Per the protocol utilized by the United States Census Bureau, race and ethnicity were measured using two separate questions. Responses were combined after data collection to produce five ethnic/racial categories:

- Hispanic/Latinx
- White
- African American/Black
- Asian American/Asian
- "Other"

The Hispanic/Latinx category includes people of all racial identities. The White, African American/Black, and Asian American/Asian categories include people only of one racial identity. The "other" category includes people who identified their race as American Indian/Alaska Native, Native Hawaiian/Pacific Islander, "multiracial/more than one race," or "other."

As illustrated below, in Riverside County, the largest racial/ethnic group is Hispanic/Latinx (45.6%), followed by White (36.6%), Asian American/Asian (7.4%), African American/Black (6.2%), and "other" (4.3%).

Figure 1. Racial/Ethnic Identity in Riverside County



Note: Hispanic/Latinx $n = 830,607$, White $n = 666,796$, Asian American/Asian $n = 134,028$, African American/Black $n = 113,422$, and "Other" $n = 78,593$.

METHODS

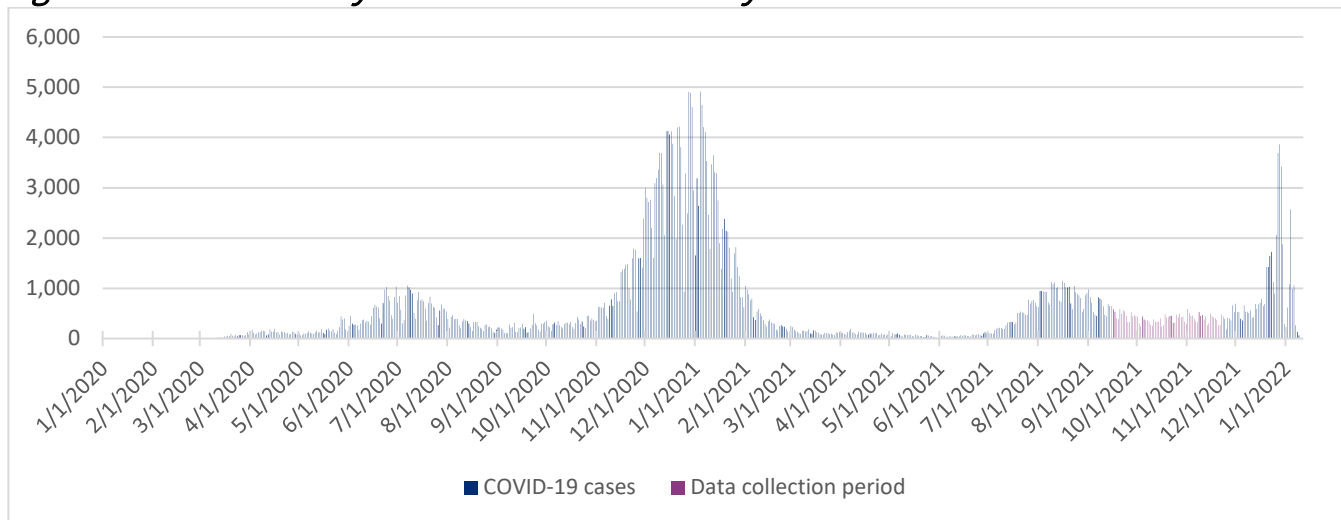
Ace Printing purchased a random sample of 40,000 households in Riverside County. HARC and Ace Printing mailed an “invitation package” to all 40,000 households, which included a cover letter (in English and Spanish), a paper survey in English, a paper survey in Spanish, a pre-paid return envelope, and a \$2 bill as a pre-incentive. Each survey was printed with a unique identifier code so that each household could only participate once. Invitation packages were mailed out in eight batches of 5,000 on the following dates:

- Batch 1: 9/15/21
- Batch 2: 9/16/21
- Batch 3: 9/21/21
- Batch 4: 9/22/21
- Batch 5: 9/24/21
- Batch 6: 9/27/21
- Batch 7: 9/29/21
- Batch 8: 9/30/21

Residents were offered a \$25 Visa card as a post-incentive; as such, those who returned the survey were sent a \$25 Visa card within two weeks of receipt of their paper survey. On 11/24/21, the completed dataset was sent to a statistician for weighting. Weighting is important to ensure that the results of the survey appropriately represent the county. Missing data were imputed using a hot deck method. Iterative proportional fitting was used to ensure marginal distributions for age, sex, race by ethnicity, and household income aligned. In the end, a response rate of approximately 21.5% was achieved.

Figure 1 below provides additional context to the data collection timeline. That is, data were being collected right after the detection of the Delta variant and before the detection of the Omicron variant. The purple cases in the figure below indicate the data collection period.

Figure 2. COVID-19 Daily Cases in Riverside County



Note: Data in the chart are from RUHS - Public Health.

RESULTS: COVID-19 Needs Assessment

Weighted Data

A fair amount of demographics from the surveys were approximately similar to Riverside County demographics; however, there were some slight biases towards older and White-identifying individuals. Thus, the survey results were weighted to account for these demographic differences to provide a more representative illustration of the county.

All results that follow were weighted according to the United States Census Bureau, American Community Survey, 1-year estimates (Household Income, Age, and Sex) and the Decennial Census, 2020 (Race, Ethnicity, and Race by Ethnicity). This weighting essentially “corrects” the skewed data.

Understanding the Data

While figures/tables may include estimates such as “percentages,” “frequencies,” “counts,” etc., these all refer to weighted estimates and percentages. Furthermore, the survey results contain data for and are weighted for the **adult population only**. Thus, this report may refer to “residents” several times, and these residents are always Riverside County residents who are ages 18 and older.

The purpose of this report was to provide estimates of racial/ethnic populations while highlighting differences between these populations. In many areas of the report, highlighting differences between populations is accomplished through identifying **statistically significant results**. If results are statistically significant during analyses, they are noted as being “significant” in the narratives of the report. These results mean that the analyses provided evidence of a true difference between groups; that is, differences found in the analyses of the samples are very likely to be real differences found in the county population. All data are included in charts and tables. The narratives, however, only describe statistically significant results. So, anytime a comparison is made in the narrative, the comparison is highlighting a real difference found in the population. This is not an intentional move of the researcher in comparing only one group against other groups; rather it is a feature of the data. A statistical test was conducted, and the test indicated that some groups are different from others. We are simply describing the results of that test. Altogether, the statistically significant differences (highlighted in narratives) describe real differences. However, all data are available in charts/tables for the reader to further examine.

Although a chart might show a difference between two groups, this difference is valid in the *sample* but is not necessarily valid in the *population* (i.e., statistically significant). The narrative accompanying each figure highlights relevant statistically significant differences. For brevity, detailed statistics regarding these statistical tests are omitted but can be provided upon request.

Lastly, because this report is based on weighted data analyzed by a variety of categories, there are times when the data may become unreliable (**statistically unstable estimates**). These statistically unstable estimates are based on the ratio of the standard error of the estimate to the estimate itself. When this ratio exceeds 30%,¹ the estimate is deemed unreliable and should not be interpreted. When this occurs in the report, the unstable estimate in the figure/table is highlighted in red.

¹ California Health Interview Survey (n.d.). UCLA Center for Health Policy Research.
<https://healthpolicy.ucla.edu/chis/faq/Pages/default.aspx#e4>

Demographics

The results from 9,144 surveys are included in this report. When weighted, these 9,144 surveys represent 1.8 million adult residents.

Race/Ethnicity

Per the protocol utilized by the U.S. Census, race and ethnicity were measured using two separate questions. To assess ethnicity, survey participants were asked, “Are you of Hispanic, Latino, or Spanish origin?”

To assess race, survey participants were then asked, “Which one of these groups would you say best represents your race?” and were presented with the following options: “White/Caucasian,” “Black/African American,” “Asian,” “American Indian/Alaska Native,” “Native Hawaiian/Pacific Islander,” “Multiracial/more than one race,” and “Other, please specify.”²

Post data collection, race and ethnicity variables were crossed to produce five ethnic/racial categories:

- Hispanic/Latinx
- White
- Asian American/Asian
- African American/Black
- “Other”

Due to low sample sizes, the racial categories American Indian/Alaska Native, Native Hawaiian/Pacific Islander, multiracial/more than one race, and “other” could not be analyzed individually. Rather than exclude this data, they were combined into the category “Other.”

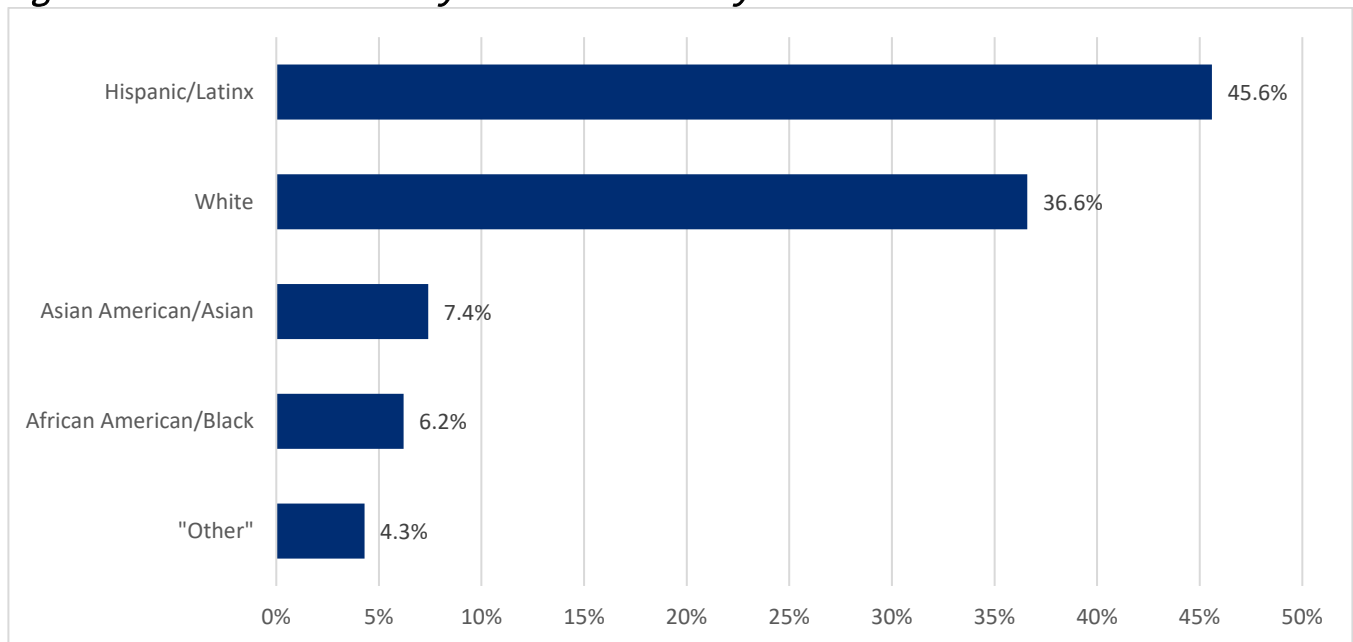
The Hispanic/Latinx category includes people of all racial identities, while the White, Asian American/Asian, African American/Black, and “Other” categories include people only of one racial identity. Hispanic/Latinx residents were categorized as a single group (regardless of race) for three reasons. First, Hispanic/Latinx residents are an ethnic group that has historically been racialized (i.e., ethnic traits such as language or Spanish surnames have been stigmatized markers of racial difference within the dominant society). Second,

² The survey’s racial categories differ slightly from that of the 2020 U.S. Census: The Census uses only the terms “White” (not also “Caucasian”) and “Some Other Race” (not “Multiracial/more than one race” or “Other”). See “Additional Instructions for Respondents.” 2020. US Census. <https://www.census.gov/programs-surveys/decennial-census/technical-documentation/questionnaires/2020/response-guidance.html>

Hispanic/Latinx residents comprise a historically cohesive community comparable to other racialized groups. Third, Hispanic/Latinx survey participants often gave their race as “other”; thus, grouping these participants in the “other” racial category would have split apart residents who identify as members of a shared social group.

As illustrated below, in Riverside County, the largest racial/ethnic group is Hispanic/Latinx (45.6%), followed by White (36.6%), Asian American/Asian (7.4%), African American/Black (6.2%), and “other” (4.3%).

Figure 3. Racial/Ethnic Identity in Riverside County



Note: Hispanic/Latinx $n = 830,607$, White $n = 666,796$, Asian American/Asian $n = 134,028$, African American/Black $n = 113,422$, and “Other” $n = 78,593$.

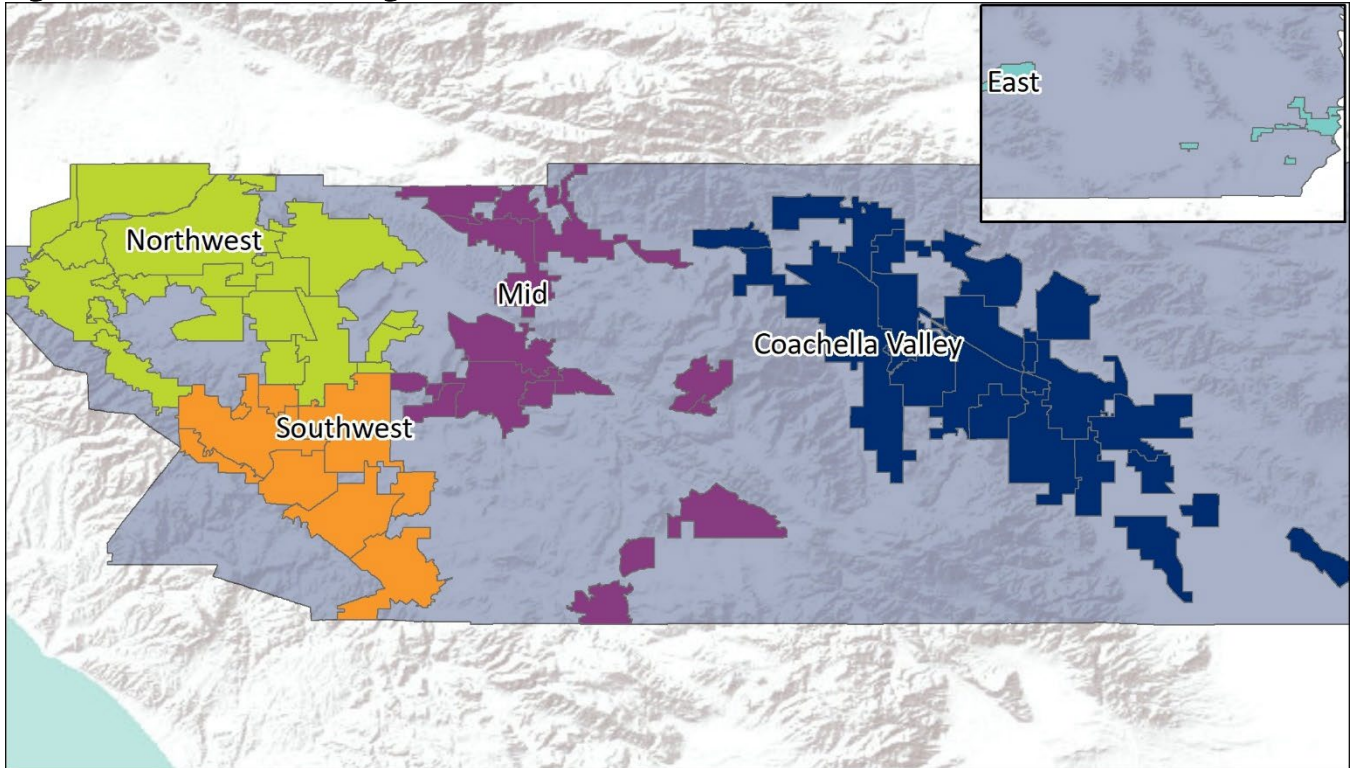
For brevity, the following terms are used:

- “White” for “non-Hispanic White”
- “Asian American/Asian” for “non-Hispanic Asian American/Asian”
- “African American/Black” for “non-Hispanic African American/Black”
- “Other” for “non-Hispanic other”

Geography

There are five Riverside County Public Health regions: the Coachella Valley, East, Mid, Northwest, and Southwest. See the figure below for a map of the regions and corresponding city boundaries.

Figure 4. Public Health Regions



One of the five regions (East) did not have a sufficient sample size to be included in these analyses. East only had 58 completed surveys representing four cities. In comparison, each of the other regions (Coachella Valley = 2,391 surveys, Mid = 1,292 surveys, Southwest = 1,856 surveys, and Northwest = 3,605 surveys) returned hundreds of surveys. Thus, the East region was excluded from these analyses.

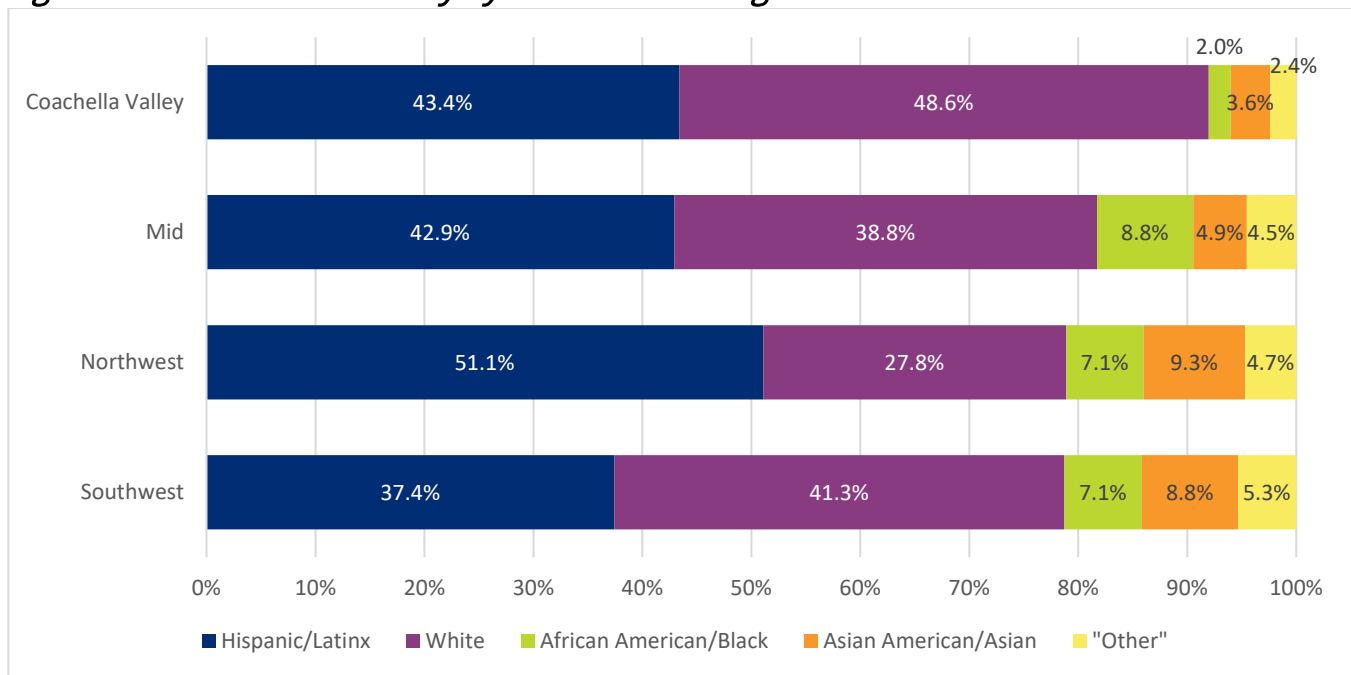
The racial/ethnic profile of the four regions is represented in the figure on the following page. Hispanic/Latinx residents are a majority in Northwest (51.1%) and a plurality in Mid (42.9%). White residents are a plurality in the Coachella Valley (48.6%) and Southwest (41.3%).

In each region, Hispanic/Latinx and White are the two largest racial/ethnic groups. African American/Black is the third-largest group in Mid (8.8%). Asian American/Asian is the fourth-largest group in the Coachella Valley (3.6%), Northwest (9.3%), and Southwest (8.8%). "Other" is the smallest group in all four regions.

The Coachella Valley is the region with the smallest proportion of Asian American/Asian, African American/Black, and “other” residents. In the Coachella Valley, these three racial/ethnic groups comprise a total of 8% compared to 21.2% in Southwest, 21.1% in Northwest, and 18.2% in Mid. Thus, the Coachella Valley is the region most dominated by the top two racial/ethnic groups (Hispanic/Latinx and White), with the smallest proportion of the remaining three racial/ethnic groups. The Coachella Valley is racially/ethnically dichotomous rather than diverse.

This relative lack of racial/ethnic diversity in the Coachella Valley reflects Riverside County’s history of development. Over the past 70 years, the agricultural economies of Mid, Southwest, and Northwest (which long relied on racialized immigrant labor) have been replaced by urban sprawl, drawing a racially/ethnically diverse population. However, the Coachella Valley has retained much of its agricultural economic base, which still relies on a racialized labor force of Hispanic/Latinx immigrants.³

Figure 5. Racial/Ethnic Identity by Public Health Region



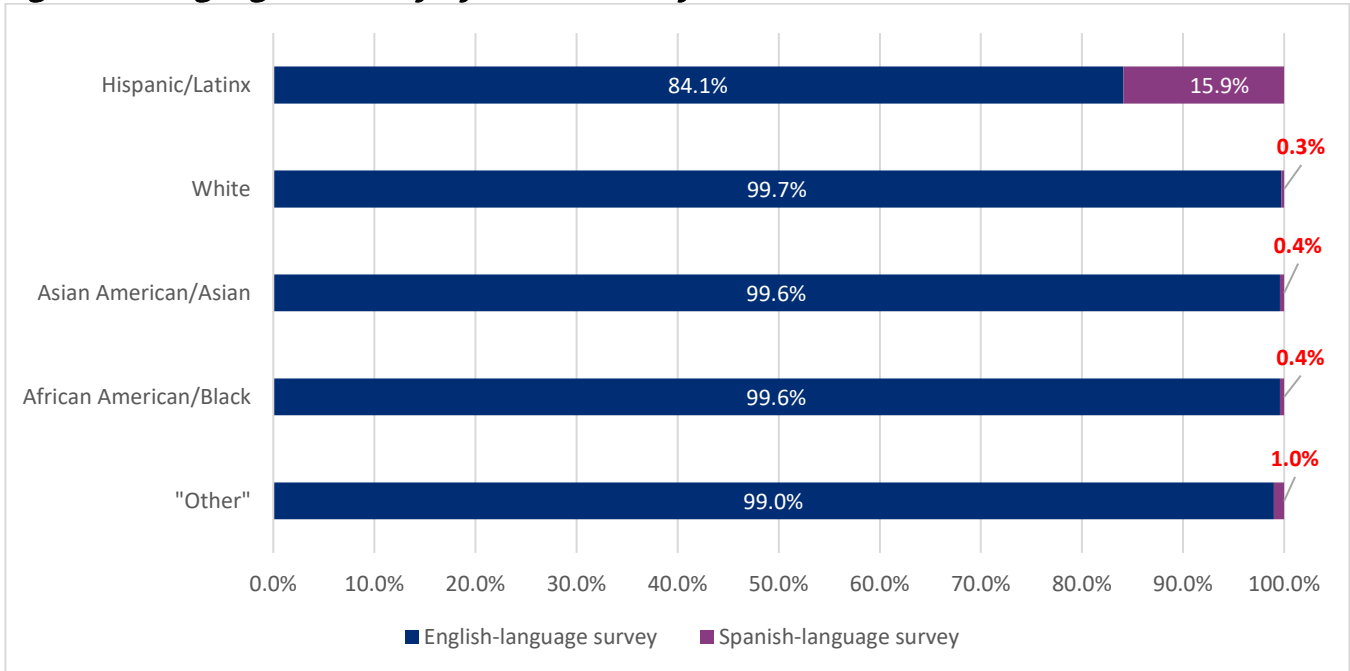
Note: Coachella Valley $n = 396,501$, Mid $n = 229,698$, Northwest $n = 802,474$, and Southwest $n = 378,205$.

³ For an overview of the racialized history of inland Southern California, see Carpio, G. (2019). *Collisions at the Crossroads: How Place and Mobility Make Race*. UC Press.

Language of Survey

Residents had the option of taking either an English- or a Spanish-language survey. Among Hispanic/Latinx residents, 84.1% took an English-language survey and 15.9% took a Spanish-language survey, as illustrated below. Virtually no one from other racial/ethnic groups took the survey in Spanish.

Figure 6. Language of Survey by Race/Ethnicity

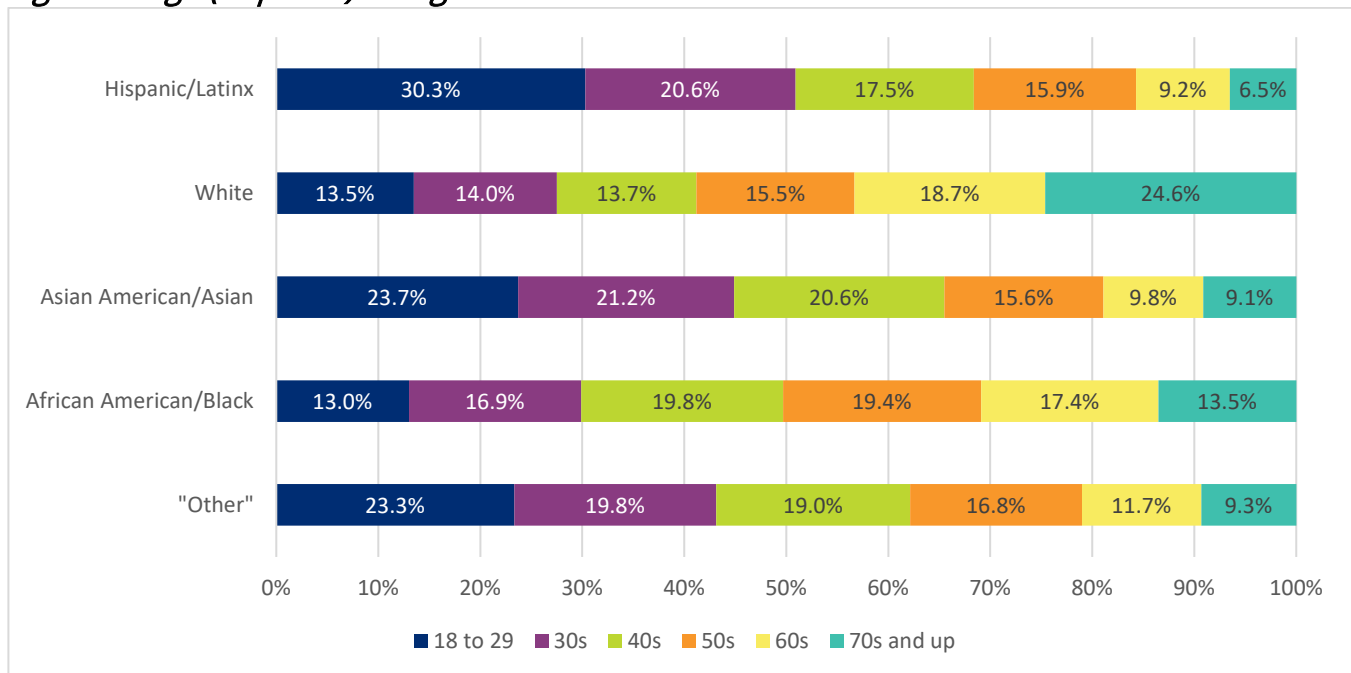


Note: Hispanic/Latinx $n = 830,607$, White $n = 666,796$, Asian American/Asian $n = 134,028$, African American/Black $n = 113,422$, and "Other" $n = 78,593$.

Age

As illustrated in the figure below, Hispanic/Latinx residents are significantly more likely to be in the 18 to 29 age group (30.3%) than are Asian American/Asian (23.7%), White (13.5%), and African American/Black residents (13.0%). Further, "other" residents were significantly more likely to be in the 18 to 29 age group (23.3%) than were White and African American/Black residents. On the other hand, White residents are significantly more likely to be in their 70s and up (24.6%) than are African American/Black (13.5%), "other" (9.3%), Asian American/Asian (9.1%), and Hispanic/Latinx residents (6.5%).

Figure 7. Age (Imputed) Categories

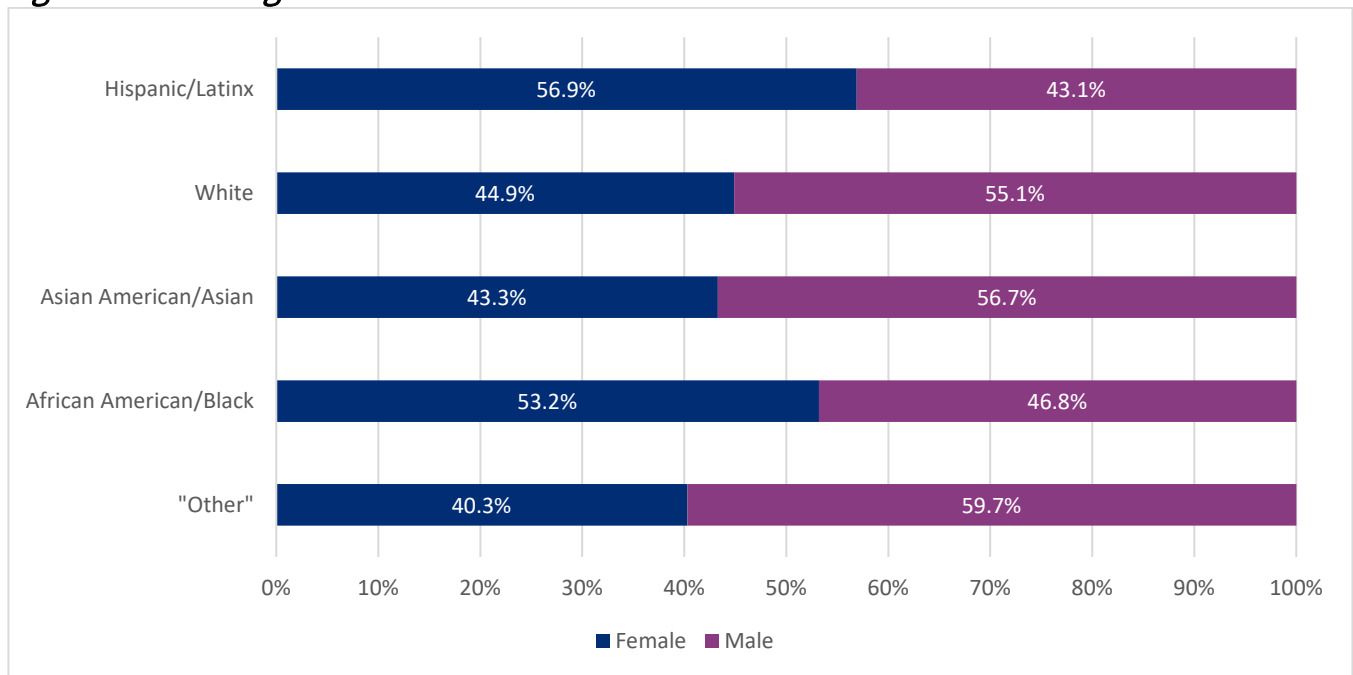


Note: Hispanic/Latinx $n = 830,607$, White $n = 666,796$, Asian American/Asian $n = 134,028$, African American/Black $n = 113,422$, and "Other" $n = 78,593$.

Gender Identity

Two questions were utilized to measure gender identity per best practices established in the field of survey research.⁴ First, residents were asked, “What sex were you assigned at birth, on your original birth certificate?” As illustrated below, Hispanic/Latinx residents had a significantly higher percentage of people assigned as female at birth (56.9%) than did White (44.9%), Asian American/Asian (43.3%), and “other” residents (40.3%). Additionally, African American/Black residents had a significantly higher percentage of people assigned female at birth (53.2%) than did White and “other” residents.

Figure 8. Sex Assigned at Birth



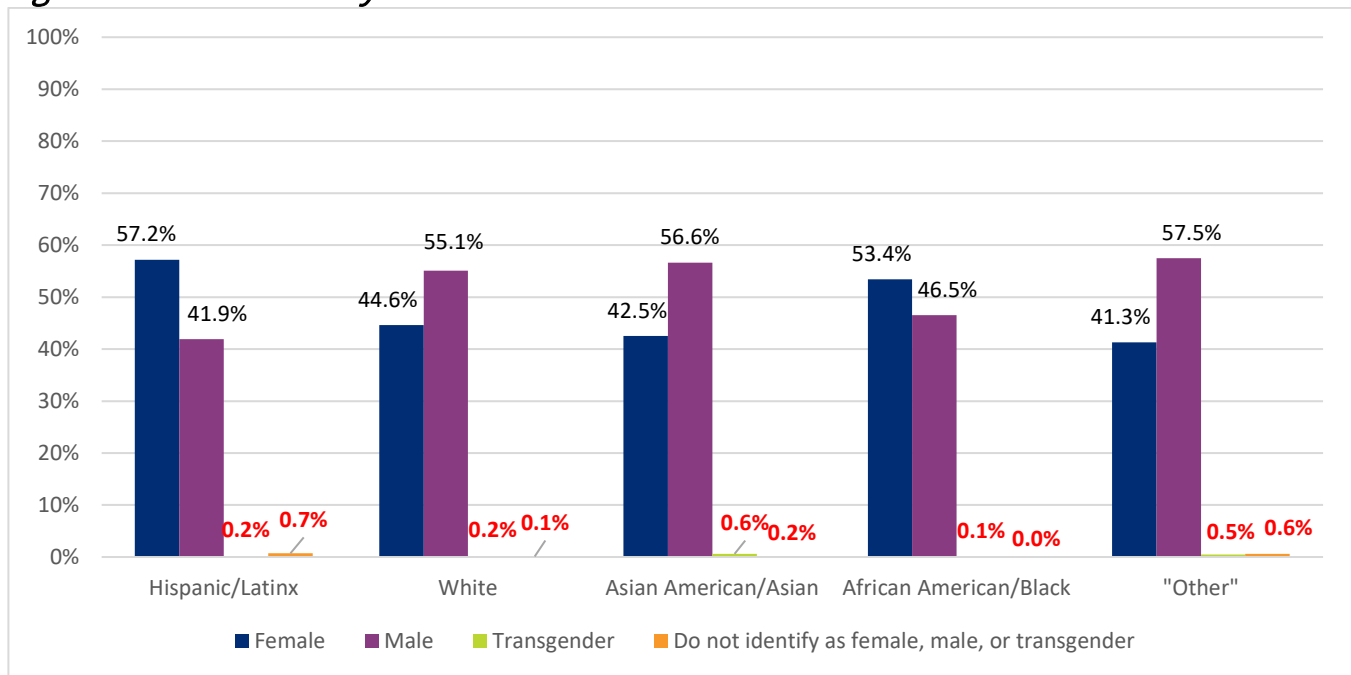
Note: Hispanic/Latinx $n = 830,607$, White $n = 666,796$, Asian American/Asian $n = 134,028$, African American/Black $n = 113,422$, and “Other” $n = 78,593$.

⁴ Williams Institute (2009). Best practices for asking questions about sexual orientation on surveys (SMART). Available online at <https://williamsinstitute.law.ucla.edu/publications/smart-so-survey/>

Next, residents were asked about their current gender identity: “How do you describe yourself?” Residents could indicate “male,” “female,” “transgender,” or “do not identify as female, male, or transgender.”

As illustrated below, a significantly higher percentage of people identified as female among both Hispanic/Latinx (57.2%) and African American/Black residents (53.4%) than did White (44.6%), Asian American/Asian (42.5%), and “other” residents (41.3%). Due to the small sample size, the percent of residents who identify as transgender or not female, male, or transgender was too small to produce statistically stable estimates and thus, should not be used.

Figure 9. Gender Identity



Note: Hispanic/Latinx $n = 814,212$, White $n = 655,679$, Asian American/Asian $n = 133,026$, African American/Black $n = 111,607$, and “Other” $n = 76,602$.

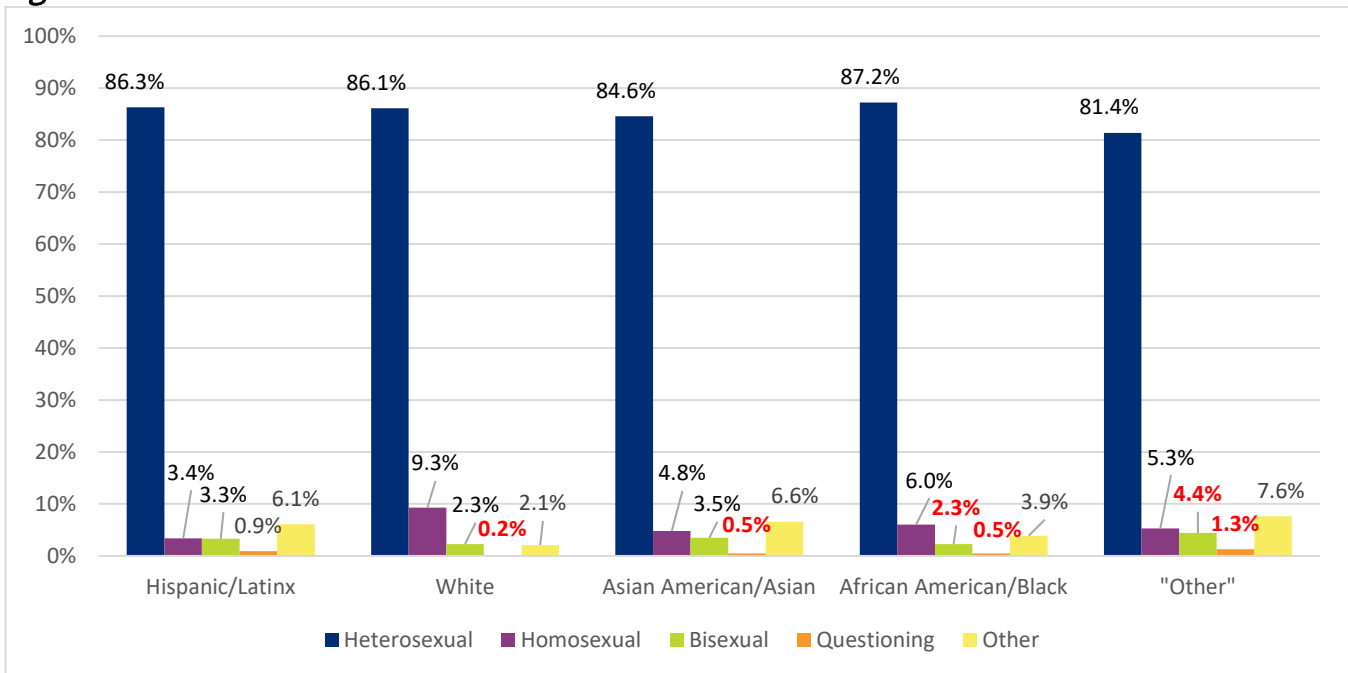
The two questions on sex assigned at birth and current gender identity were combined to identify how many people currently identify with a gender that does not match their sex at birth (e.g., born a male while now identifying as a female). Overall, 1.3% of Hispanic/Latinx participants have a current gender identity that does not match their original assigned sex, as do 0.7% of White participants. The other three racial/ethnic groups had sample sizes too small to estimate accurately.

Sexual Orientation

To measure sexual orientation, participants were asked, "Do you consider yourself to be..." and were presented with a list of responses to select from.

As illustrated below, over 80.0% of each racial/ethnic group identified as heterosexual. There was a significantly higher percentage of people who identified as homosexual among White residents (9.3%) than among Hispanic/Latinx residents (3.4%).

Figure 10. Sexual Orientation



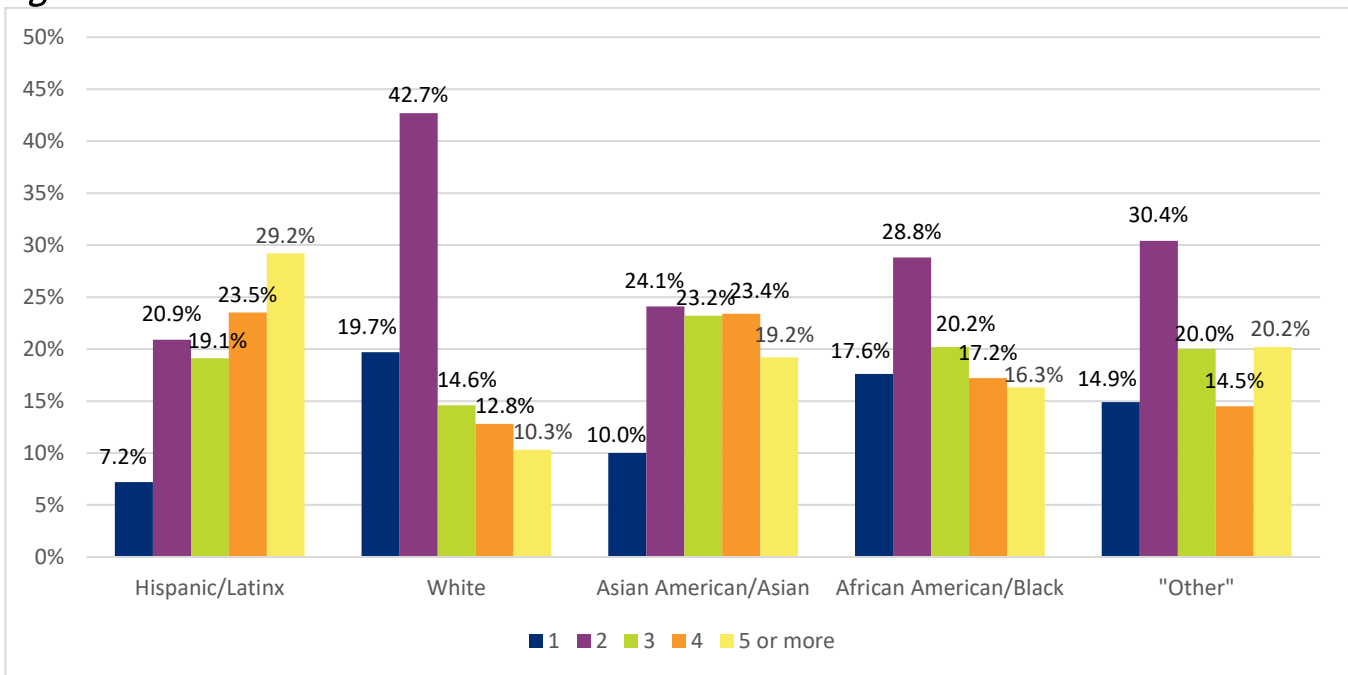
Note: Hispanic/Latinx $n = 756,611$, White $n = 637,623$, Asian American/Asian $n = 124,420$, African American/Black $n = 106,717$, and "Other" $n = 74,264$.

Household Size

The median household size for Riverside County was two people.

As illustrated below, a household size of two people was significantly more likely to be found among White residents (42.7%) than among “other” (30.4%), African American/Black (28.8%), Asian American/Asian (24.1%), and Hispanic/Latinx residents (20.9%). Hispanic/Latinx residents were significantly more likely to live in a household with three or more people (71.8%) than were White residents (37.7%).

Figure 11. Household Size

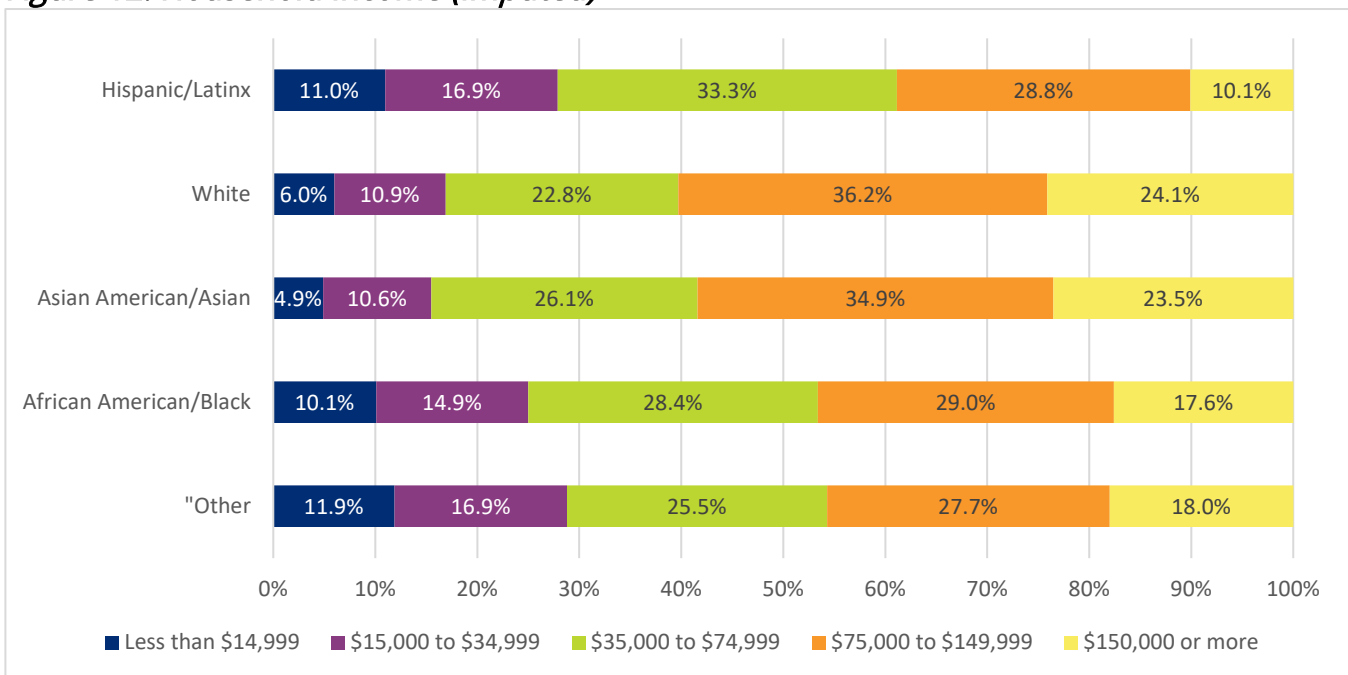


Note: Hispanic/Latinx $n = 815,509$, White $n = 653,796$, Asian American/Asian $n = 132,165$, African American/Black $n = 111,897$, and “Other” $n = 76,948$.

Income and Poverty

Residents were asked, “Last year, what was your household income from all sources before taxes?” There were significantly higher percentages of income levels above \$150,000 among White (24.1%), Asian American/Asian (23.5%), African American/Black (17.6%), and “other” residents (18.0%) than there was among Hispanic/Latinx residents (10.1%). Further, Hispanic/Latinx residents were significantly more likely to earn less than \$34,999 (27.9%) than were White (16.9%) and Asian American/Asian residents (15.5%). Additionally, African American/Black residents were significantly more likely to earn less than \$14,999 (10.1%) than were White residents (6.0%).

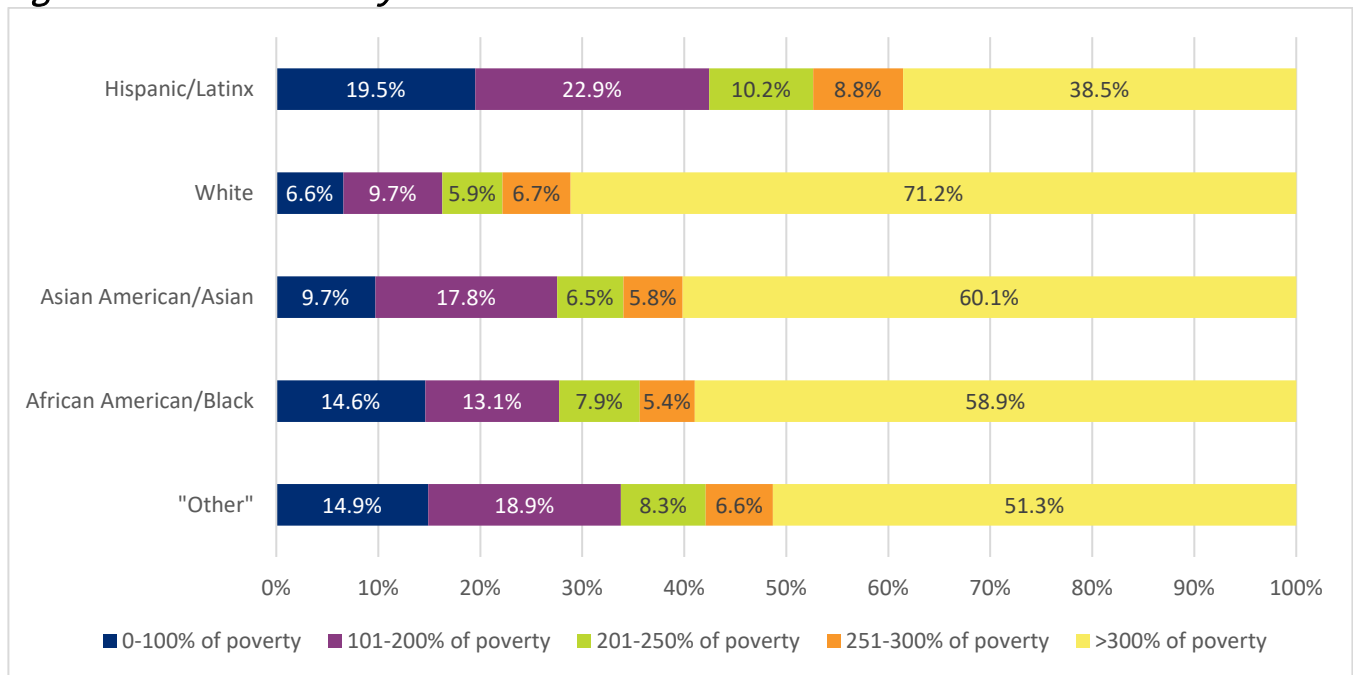
Figure 12. Household Income (Imputed)



Note: Hispanic/Latinx $n = 830,607$, White $n = 666,796$, Asian American/Asian $n = 134,028$, African American/Black $n = 113,422$, and “Other” $n = 78,593$.

By using household income and the number of people within the household, the federal poverty level (FPL) was calculated using the Department of Health and Human Service’s guidelines for poverty in 2021. As illustrated below, a significantly higher percentage of those living above 300% of the FPL were found among White residents (71.2%) than there were among Asian American/Asian (60.1%), African American/Black (58.9%), “other” (51.3%), and Hispanic/Latinx residents (38.5%). Further, there was a significantly higher percentage of those living below 200% of the FLP among Hispanic/Latinx residents (42.4%) than there was among Asian American/Asian (27.5%) and White residents (21.2%).

Figure 13. Federal Poverty Level

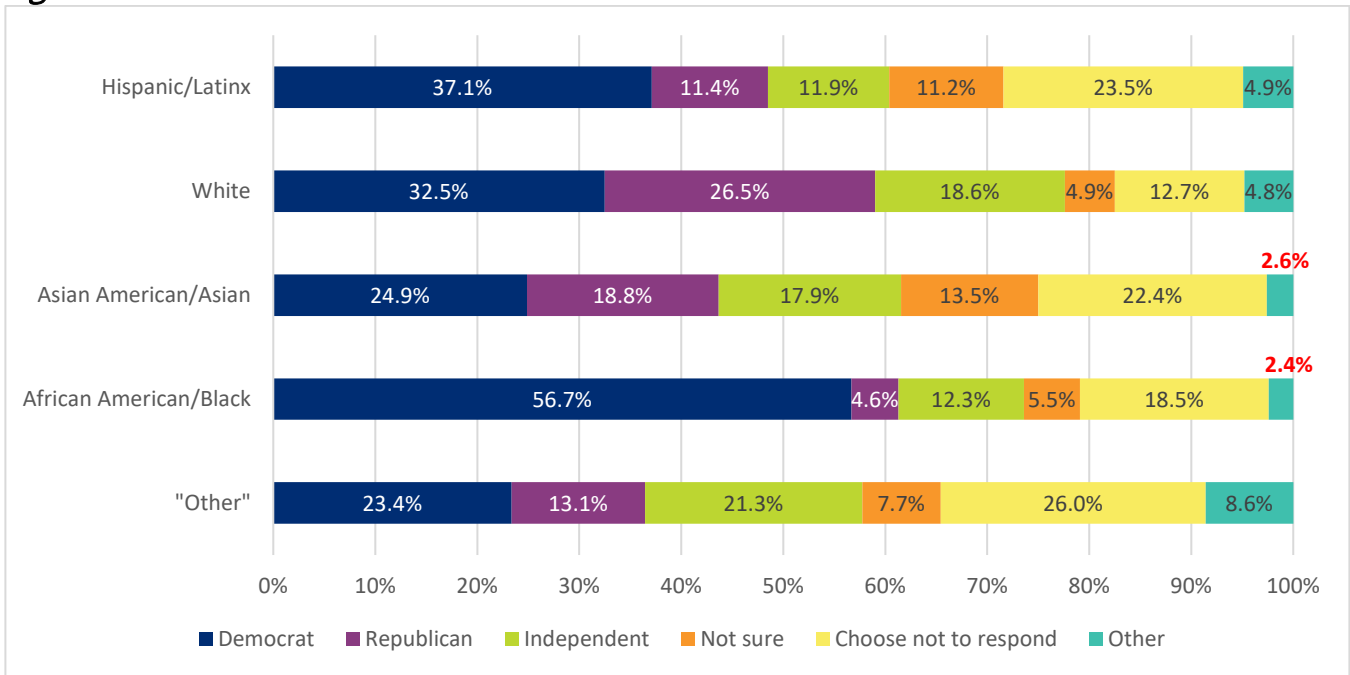


Note: Hispanic/Latinx $n = 635,283$, White $n = 508,309$, Asian American/Asian $n = 106,100$, African American/Black $n = 86,450$, and “Other” $n = 58,652$.

Political Affiliation

For the final demographic question, residents were asked, “Generally speaking, do you think of yourself as a...?” and were presented with a list of responses to select from. As illustrated below, White residents were significantly more likely to identify as Republicans (26.5%) than were Asian American/Asian (18.8%), “other” (13.1%), Hispanic/Latinx (11.4%), and African American/Black residents (4.6%). Hispanic/Latinx residents were significantly more likely to identify as Democrats (37.1%) than were White (32.5%), Asian American/Asian (24.9%), and “other” residents (23.4%). In addition, African American/Black residents were significantly more likely to identify as Democrats (56.7%) than were all other racial/ethnic groups.

Figure 14. Political Affiliation



Note: Hispanic/Latinx *n* = 807,057, White *n* = 649,660, Asian American/Asian *n* = 130,516, African American/Black *n* = 110,981, and “Other” *n* = 76,211.

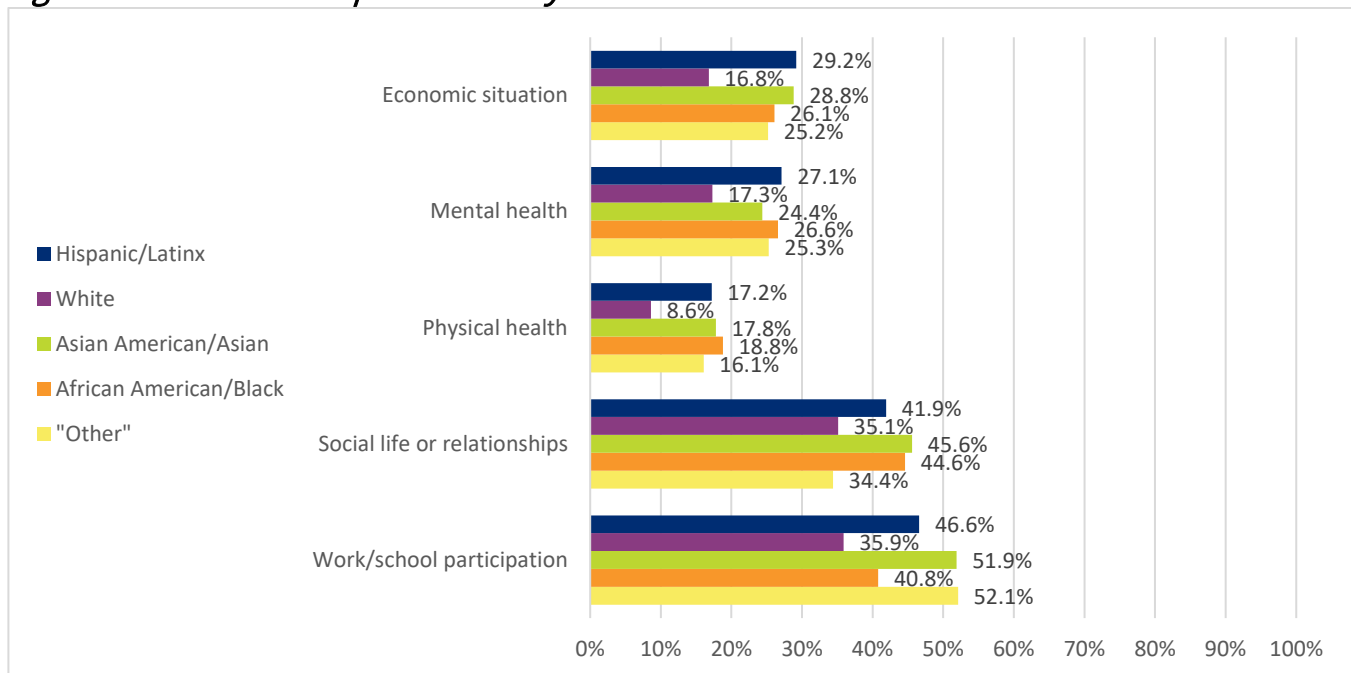
COVID-19 Attitudes and Behaviors

Impact of COVID-19

The world has forever changed since the first case of COVID-19. To understand areas of impact, residents were asked, “How had the COVID-19 pandemic impacted your personal daily life with regards to...” and were given a list of options. For clarity, responses for “To a great extent” are the only responses illustrated in the figure below, whereas “not at all,” “very little,” and “somewhat” are excluded. However, proportions for all responses are on the following page in a table. Overall, high percentages of adults experienced impacts in work/school participation and social life or relationships across the racial/ethnic groups. In work/school participation, a majority of “other” (52.1%) and Asian American/Asian residents (51.9%) experienced great impacts. For social life or relationships, Asian American/Asian (45.6%), African American/Black (44.6%), and Hispanic/Latinx residents (41.9%) were significantly more likely to have a great impact than were White residents (35.1%).

White residents were significantly less likely to experience great impacts than all other racial/ethnic groups in their economic situation, mental health, physical health, and work/school participation.

Figure 15. COVID-19 Impacts on Daily Life



Note: Economic situation: Hispanic/Latinx $n = 780,694$, White $n = 623,305$, Asian American/Asian $n = 130,080$, African American/Black $n = 104,255$, and “Other” $n = 74,693$. Mental health: Hispanic/Latinx $n = 776,057$, White $n = 630,038$, Asian American/Asian $n = 130,102$, African American/Black $n = 106,063$, and “Other” $n = 75,560$. Physical health: Hispanic/Latinx $n = 772,223$, White $n = 626,337$, Asian American/Asian $n = 129,200$, African American/Black $n = 103,960$, and “Other” $n = 74,926$. Social life or relationships: Hispanic/Latinx $n = 798,235$,

White $n = 647,317$; Asian American/Asian $n = 131,903$; African American/Black $n = 109,859$, and "Other" $n = 76,399$. Work/school participation: Hispanic/Latinx $n = 767,030$, White $n = 601,885$; Asian American/Asian $n = 126,645$; African American/Black $n = 104,440$, and "Other" $n = 74,271$.

Table 1. COVID-19 Impacts on Personal Daily Life

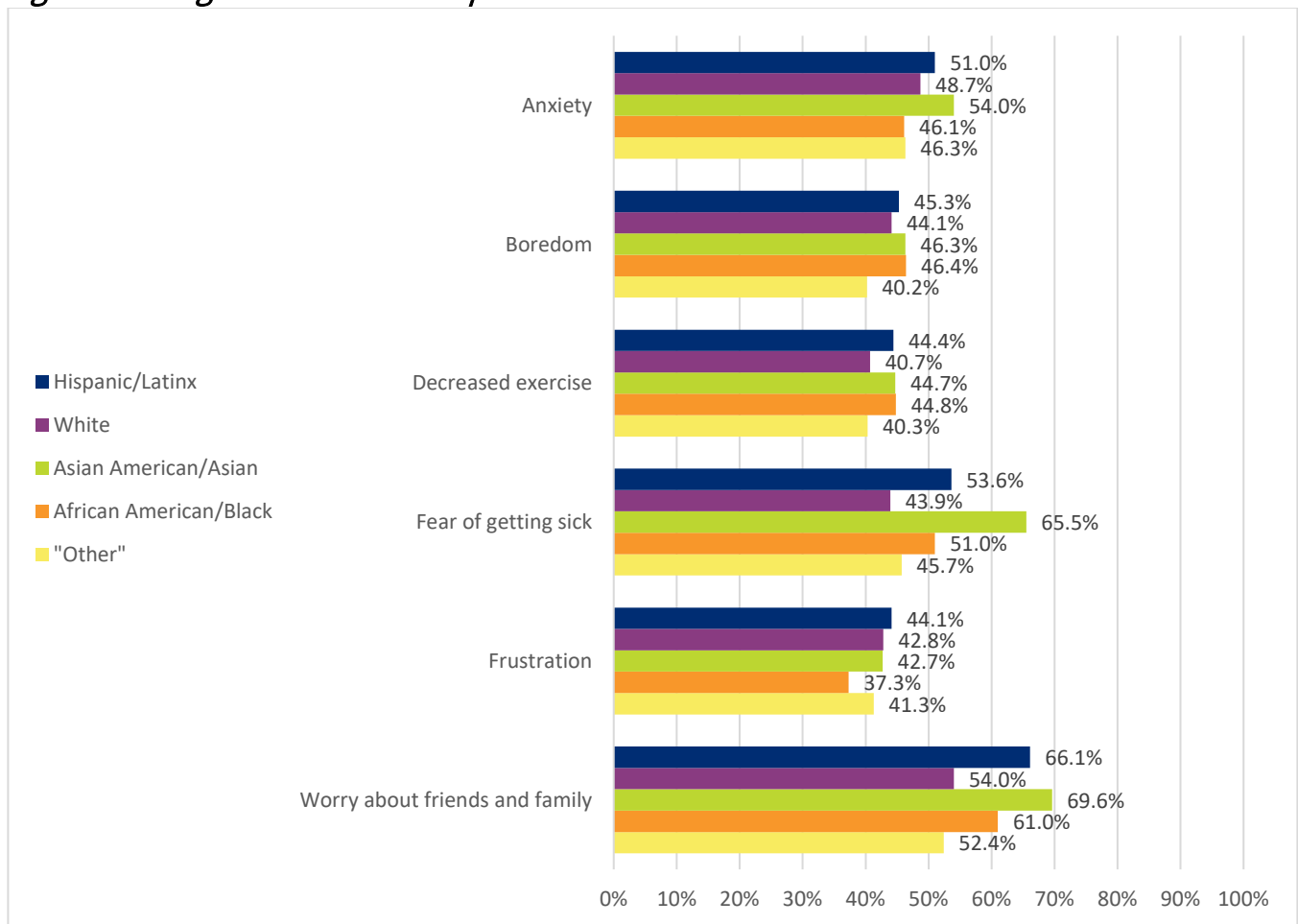
Category	Rating	Hispanic/ Latinx	White	Asian American /Asian	African American /Black	"Other"
Work/school participation	Not at all	19.5%	34.8%	15.5%	28.0%	23.1%
	Very little	10.6%	10.0%	10.7%	12.5%	9.6%
	Somewhat	23.3%	19.2%	21.9%	18.7%	15.2%
	To a great extent	46.6%	35.9%	51.9%	40.8%	52.1%
Economic situation	Not at all	22.8%	34.7%	15.9%	27.6%	24.9%
	Very little	16.4%	23.1%	20.2%	18.8%	21.9%
	Somewhat	31.6%	25.4%	35.2%	27.6%	28.0%
	To a great extent	29.2%	16.8%	28.8%	26.1%	25.2%
Physical health	Not at all	31.1%	43.2%	20.7%	34.1%	34.4%
	Very little	23.4%	25.3%	27.6%	23.2%	23.2%
	Somewhat	28.3%	22.8%	33.9%	23.9%	26.3%
	To a great extent	17.2%	8.6%	17.8%	18.8%	16.1%
Mental health	Not at all	23.5%	25.3%	16.0%	27.0%	28.7%
	Very little	17.6%	22.7%	21.9%	18.3%	16.1%
	Somewhat	31.8%	34.8%	37.7%	28.1%	29.9%
	To a great extent	27.1%	17.3%	24.4%	26.6%	25.3%
Social life or relationships	Not at all	11.9%	11.7%	4.3%	11.4%	15.2%
	Very little	12.0%	14.7%	14.8%	12.3%	14.2%
	Somewhat	34.2%	38.4%	35.3%	31.8%	36.2%
	To a great extent	41.9%	35.1%	45.6%	44.6%	34.4%

Note: Economic situation: Hispanic/Latinx $n = 780,694$, White $n = 623,305$, Asian American/Asian $n = 130,080$, African American/Black $n = 104,255$, and "Other" $n = 74,693$. Mental health: Hispanic/Latinx $n = 776,057$, White $n = 630,038$, Asian American/Asian $n = 130,102$, African American/Black $n = 106,063$, and "Other" $n = 75,560$. Physical health: Hispanic/Latinx $n = 772,223$, White $n = 626,337$, Asian American/Asian $n = 129,200$, African American/Black $n = 103,960$, and "Other" $n = 74,926$. Social life or relationships: Hispanic/Latinx $n = 798,235$, White $n = 647,317$; Asian American/Asian $n = 131,903$; African American/Black $n = 109,859$, and "Other" $n = 76,399$. Work/school participation: Hispanic/Latinx $n = 767,030$, White $n = 601,885$; Asian American/Asian $n = 126,645$; African American/Black $n = 104,440$, and "Other" $n = 74,271$.

Residents were also asked to select from a list of ways in which they were affected by COVID-19. They were asked, "COVID-19 had also affected how people feel and act. Which of the following have you experienced due to COVID-19? Please select all that apply." Negative COVID-19 experiences included 18 response options. For clarity, only the top six responses are illustrated in the figure below, whereas all responses are in a table on the following page.

Asian American/Asian residents (65.5%) were significantly more likely to select "fear of getting sick" than were all the other racial/ethnic groups. Both Asian American/Asian (69.6%) and Hispanic/Latinx residents (66.1%) were significantly more likely to select "worry about friends and family" than were African American/Black (61.0%), White (54.0%), and "other" residents (52.4%).

Figure 16. Negative COVID-19 Experiences



Note: Hispanic/Latinx $n = 817,829$, White $n = 655,509$, Asian American/Asian $n = 132,950$, African American/Black $n = 112,016$, and "Other" $n = 77,384$.

Table 2. Negative COVID-19 Experiences

Experience	Hispanic/ Latinx	White	Asian American/ Asian	African American/ Black	“Other”
Worry about friends and family	66.1%	54.0%	69.6%	61.0%	52.4%
Anxiety	53.6%	48.7%	54.0%	46.1%	46.3%
Fear of getting sick	51.0%	43.9%	65.5%	51.0%	45.7%
Boredom	45.3%	44.1%	46.3%	46.4%	40.2%
Decreased exercise	44.4%	40.7%	44.7%	44.8%	40.3%
Frustration	44.1%	42.8%	42.7%	37.3%	41.3%
Increased eating	30.6%	25.4%	29.9%	33.5%	27.6%
Depression	28.7%	26.5%	28.3%	26.4%	27.1%
Trouble sleeping	26.4%	20.6%	15.0%	25.5%	23.9%
Loneliness	23.8%	23.8%	29.2%	22.4%	25.0%
Conflict in the home	18.9%	14.3%	22.4%	15.7%	16.9%
Confusion	18.1%	12.5%	15.7%	13.7%	14.6%
Decreased sexual activity	13.3%	11.7%	11.6%	16.2%	16.6%
Loss of hope	11.8%	10.2%	11.2%	10.0%	13.1%
Increased alcohol or other substance use	9.4%	12.4%	7.5%	6.9%	11.8%
None of the above	8.0%	11.1%	5.7%	11.8%	12.3%
Other	5.4%	6.2%	5.3%	4.3%	10.7%
Increased sexual activity	4.1%	2.3%	2.7%	3.5%	3.7%

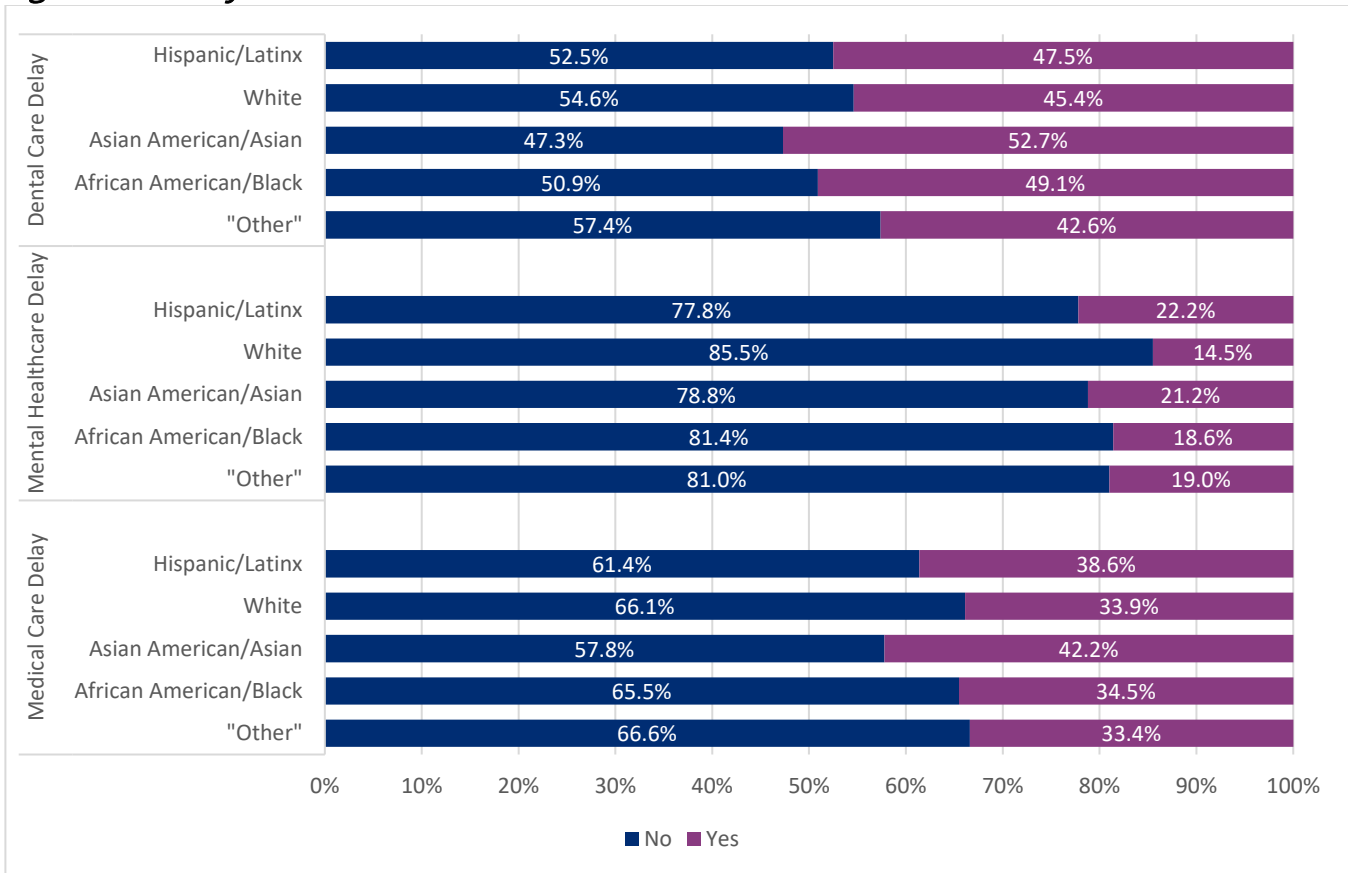
Note: Hispanic/Latinx $n = 817,829$, White $n = 655,509$, Asian American/Asian $n = 132,950$, African American/Black $n = 112,016$, and “Other” $n = 77,384$.

Delay/Absence of Healthcare During COVID-19

Access to regular, affordable healthcare is critical to the overall health and well-being of an individual. As a result of COVID-19, many day-to-day activities were either delayed or canceled. Among these activities was access to healthcare, which is dangerous, as a disruption in care can increase the risk for life-threatening medical emergencies.⁵

To assess the delay in healthcare, residents were asked, “At any time in the last 12 months, did you DELAY getting _____ because of the coronavirus pandemic?” and could rate three types of care: dental care, mental healthcare, and medical care. As illustrated below, Asian American/Asian and Hispanic/Latinx residents were significantly more likely to report delays in getting medical care and mental healthcare than were White residents. There were no significant differences among the racial/ethnic groups in reporting delays in getting dental care.

Figure 17. Delays in Healthcare



Note: Dental Care: Hispanic/Latinx *n* = 802,398, White *n* = 650,345, Asian American/Asian *n* = 132,123, African American/Black *n* = 110,351, and “Other” *n* = 77,090. Mental Healthcare: Hispanic/Latinx *n* = 764,304, White *n* = 650,345, Asian American/Asian *n* = 132,123, African American/Black *n* = 110,351, and “Other” *n* = 77,090. Medical Care: Hispanic/Latinx *n* = 764,304, White *n* = 650,345, Asian American/Asian *n* = 132,123, African American/Black *n* = 110,351, and “Other” *n* = 77,090.

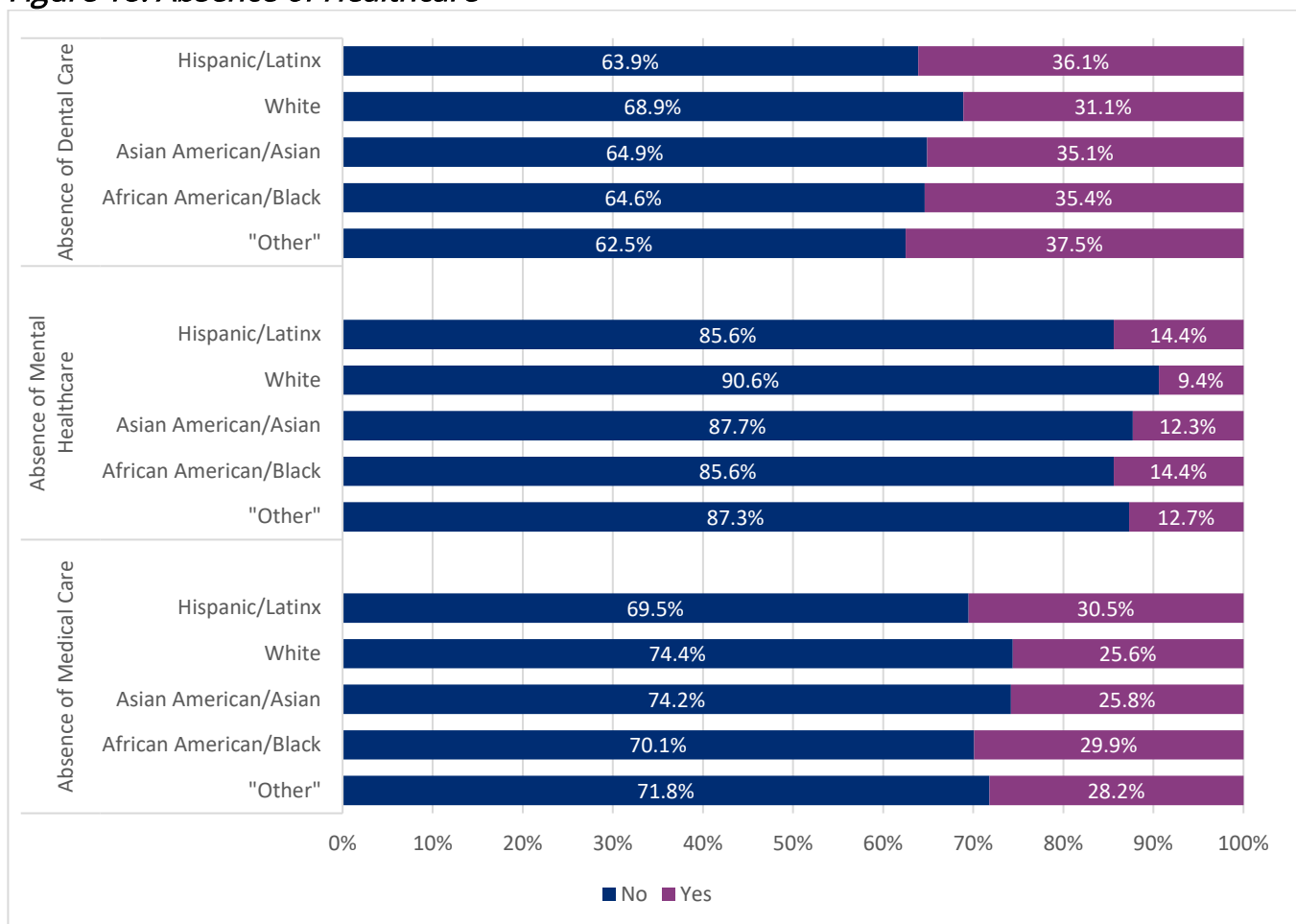
⁵ Czeisler MĒ, Marynak K, Clarke KE, et al. Delay or Avoidance of Medical Care Because of COVID-19-Related Concerns – United States, June 2020. MMWR Morb Mortal Wkly Rep 2020;69:1250-1257. DOI: <http://dx.doi.org/10.15585/mmwr.mm6936a4external>

= 626,966, Asian American/Asian $n = 125,470$, African American/Black $n = 106,348$, and "Other" $n = 74,143$.
 Medical Care: Hispanic/Latinx $n = 803,525$, White $n = 651,511$, Asian American/Asian $n = 130,809$, African American/Black $n = 109,848$, and "Other" $n = 77,322$.

Whereas the above question asked about delays in healthcare, the next question asked about the absence of healthcare. Residents were asked, "At any time in the last 12 months, did you need _____ for something other than coronavirus, but DID NOT GET IT because of the coronavirus pandemic?"

As illustrated below, the absence of care was similar across racial/ethnic groups. Hispanic/Latinx residents were significantly more likely to report not getting medical care (30.5%), mental healthcare (14.4%), and dental care (36.1%) than were White residents (25.6%, 9.4%, and 31.1%, respectively).

Figure 18. Absence of Healthcare



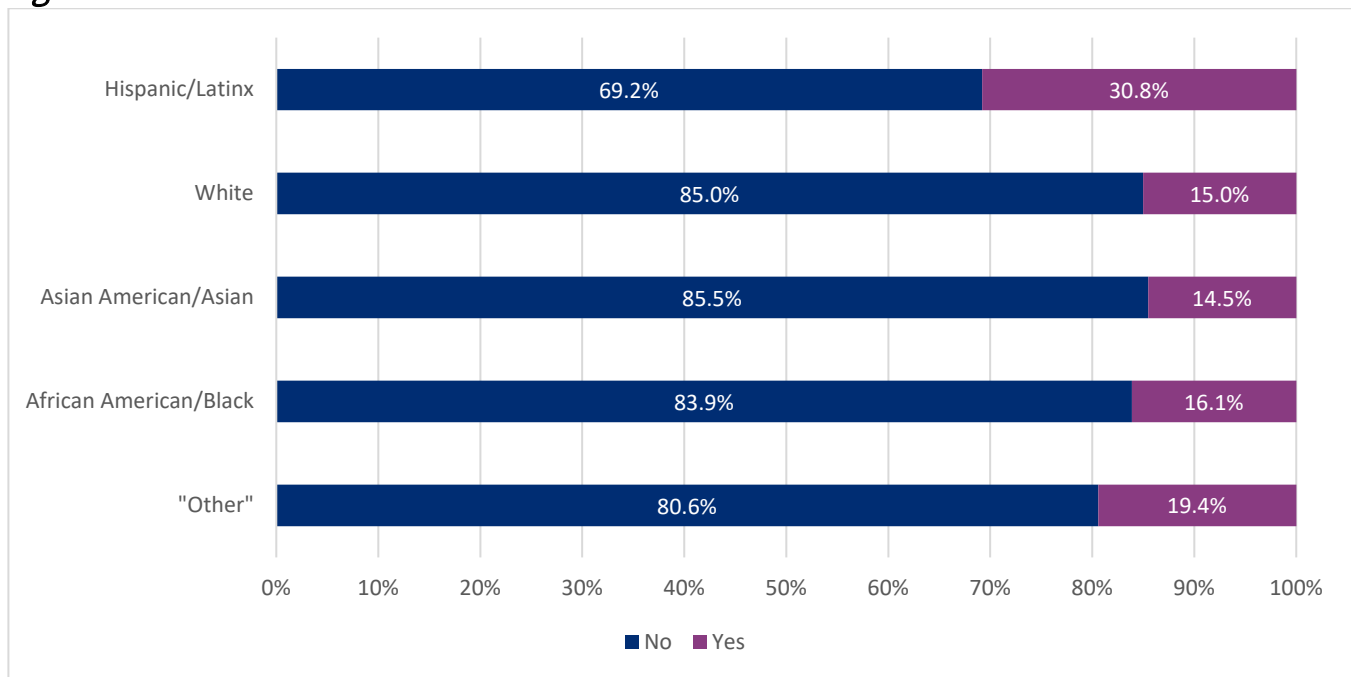
Note: Dental Care: Hispanic/Latinx $n = 802,398$, White $n = 650,345$, Asian American/Asian $n = 132,123$, African American/Black $n = 110,351$, and "Other" $n = 77,090$. Mental Health Care: Hispanic/Latinx $n = 764,304$, White $n = 626,966$, Asian American/Asian $n = 125,470$, African American/Black $n = 106,348$, and "Other" $n = 74,143$.

Medical Care: Hispanic/Latinx $n = 803,525$, White $n = 651,511$, Asian American/Asian $n = 130,809$, African American/Black $n = 109,848$, and "Other" $n = 77,322$.

COVID-19 Diagnosis

Residents were asked, "Have you ever tested positive for COVID-19?" Hispanic/Latinx residents (69.2%) were significantly more likely to report having tested positive for COVID-19 than were all other racial/ethnic groups.

Figure 19. Tested Positive for COVID-19



Note: Hispanic/Latinx $n = 771,563$, White $n = 633,130$, Asian American/Asian $n = 129,748$, African American/Black $n = 106,671$, and "Other" $n = 74,582$.

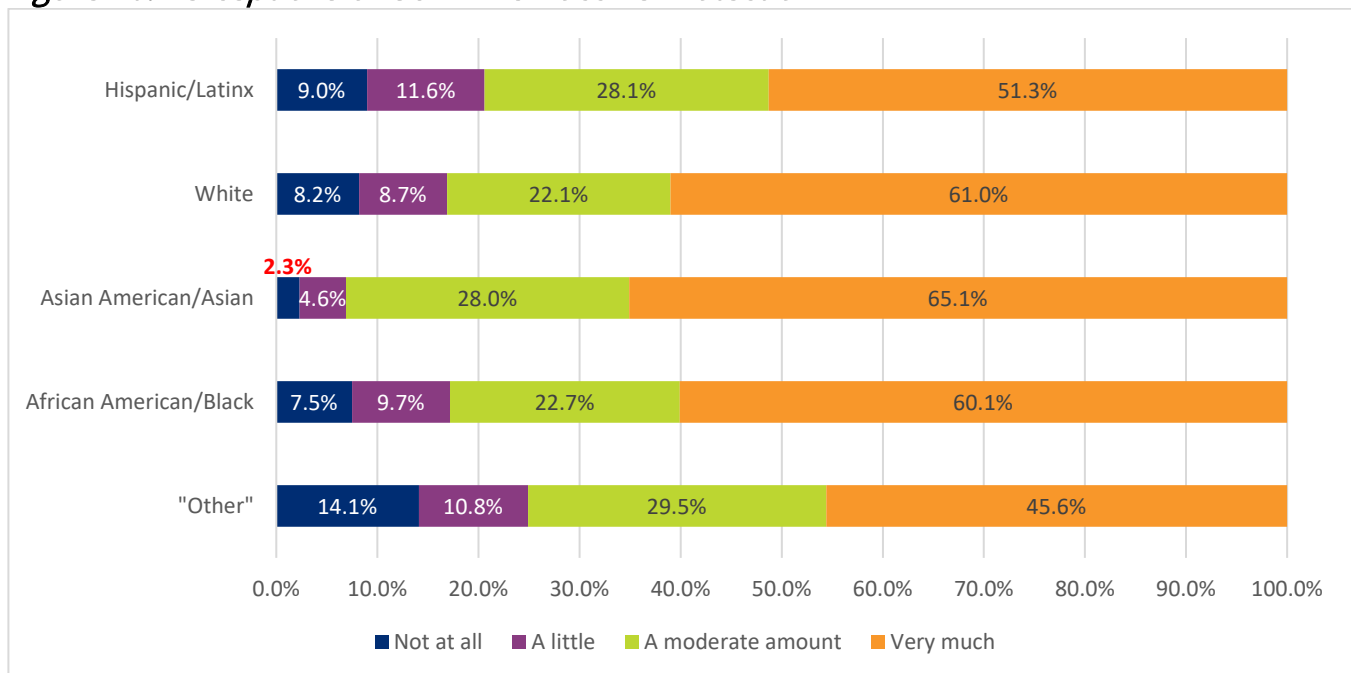
COVID-19 Vaccination

Perceptions of COVID-19 Vaccine

Misinformation regarding the purpose and efficacy of COVID-19 vaccines had been perpetuated throughout the pandemic. This misinformation can affect beliefs/attitudes toward vaccines, as well as the rate of vaccination.⁶

All survey participants were asked, "In your opinion, how much would the COVID-19 vaccine protect you against getting COVID-19?" A significantly higher percentage of Asian American/Asian (65.1%), White (61.0%), and African American/Black residents (60.1%) said "very much" than did Hispanic/Latinx (51.3%) and "other" residents (45.6%).

Figure 20. Perceptions of COVID-19 Vaccine Protection



Note: Hispanic/Latinx $n = 818,396$, White $n = 658,358$, Asian American/Asian $n = 133,391$, African American/Black $n = 112,073$, and "Other" $n = 76,604$.

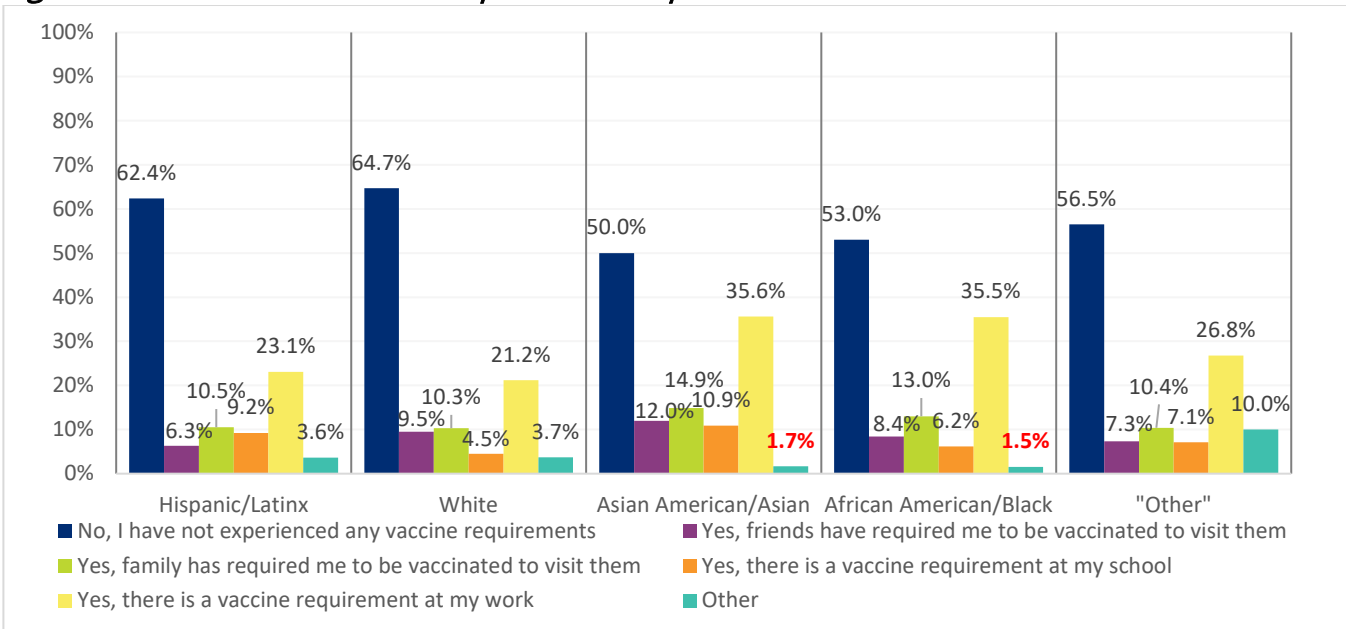
⁶ How to Address COVID-19 Vaccine Misinformation (2021). Center for Disease Control and Prevention. <https://www.cdc.gov/vaccines/covid-19/health-departments/addressing-vaccine-misinformation.html>

COVID-19 Vaccine Mandates

Requirements regarding COVID-19 vaccination and testing have proliferated since the introduction of the COVID-19 vaccine. For example, in the latter half of 2021, the California Department of Public Health required all workers in healthcare facilities to be vaccinated,⁷ and even city-level mandates had been issued regarding dining in restaurants.⁸

To assess where residents have experienced vaccine mandates/requirements, residents were asked, “Have you experienced any COVID-19 vaccine requirements?” and were encouraged to select all that apply. There was a significantly higher percentage of White (64.7%) and Hispanic/Latinx residents (62.4%) who have not experienced any vaccine requirements than there was for African American/Black (53.0%) and Asian American/Asian residents (50.0%). Further, there was a significantly higher percentage of Asian American/Asian (35.6%) and African American/Black residents (35.5%) who have a vaccine requirement at their work than there were for Hispanic/Latinx (23.1%) and White residents (21.2%).

Figure 21. COVID-19 Vaccine Requirement Experiences



Note: Hispanic/Latinx *n* = 728,913, White *n* = 570,780, Asian American/Asian *n* = 123,134, African American/Black *n* = 93,508, and “Other” *n* = 68,230.

⁷ State Public Health Officer Order of August 5, 2021. California Department of Public Health. (2021). <https://www.cdph.ca.gov/Programs/CID/DCDC/Pages/COVID-19/Order-of-the-State-Public-Health-Officer-Health-Care-Worker-Vaccine-Requirement.aspx>

⁸ New Citywide COVID-19 Safety Requirements (2021). City of Palm Springs. <https://www.palmspringsca.gov/government/covid-19-updates>

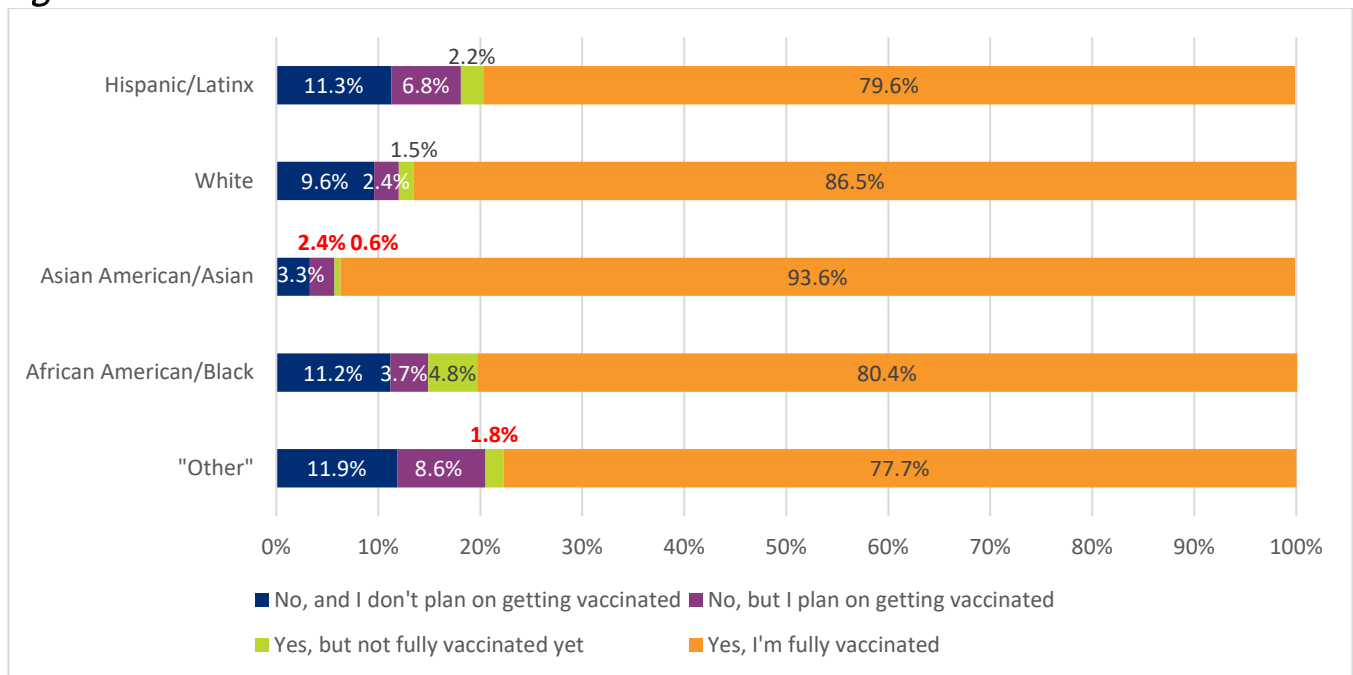
COVID-19 Vaccination Status

In California, the COVID-19 vaccine was distributed in a phased approach to reach first populations with the highest risk of acquiring the disease or of the highest risk of developing severe illness. Thus, certain groups such as healthcare workers, staff at skilled nursing facilities and similar settings, essential workers, and people with a higher risk of severe illness, including the elderly, could obtain a vaccine before the general adult population.⁹

At the time of the data collection (September to November 2021), the general adult population was eligible for the COVID-19 vaccine and had been so for several months. As such, residents were asked, "Have you had the COVID-19 vaccine?"

Asian American/Asian (93.6%) and White residents (86.5%) were significantly more likely to be fully vaccinated than all other racial/ethnic groups, as illustrated in the figure below.

Figure 22. COVID-19 Vaccination Status



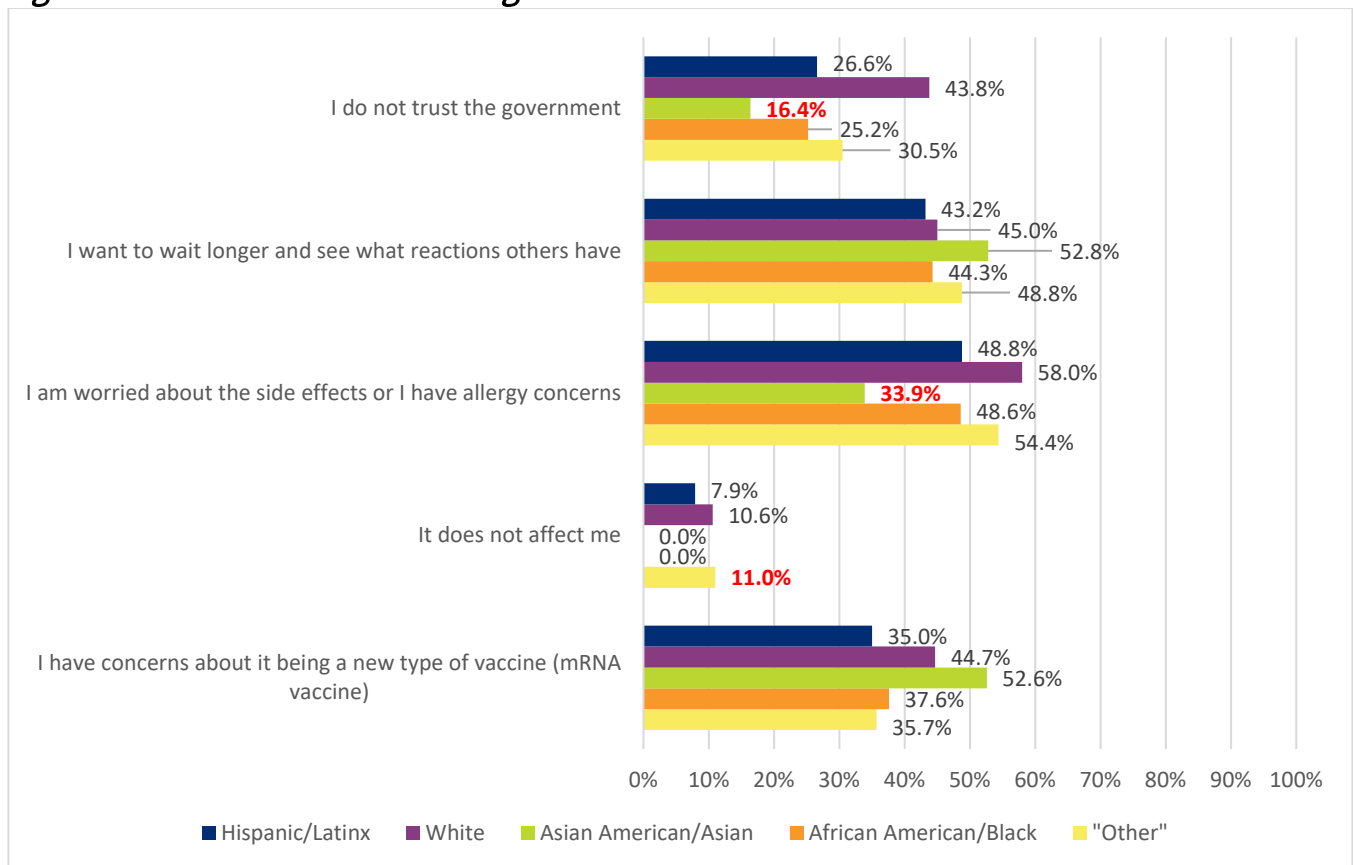
Note: Hispanic/Latinx $n = 821,281$, White $n = 656,534$, Asian American/Asian $n = 132,975$, African American/Black $n = 112,266$, and "Other" $n = 76,864$.

⁹ COVID-19 Vaccination Plan (2020). California Department of Public Health. https://www.cdph.ca.gov/Programs/CID/DCDC/CDPH%20Document%20Library/COVID-19/COVID-19-Vaccination-Plan-California-Interim-Draft_V1.0.pdf?_cldee=Y2Jha2VyQGNhbGhvc3BpdGFsLm9yZw%3d%3d&recipientid=contact-a44bb655054aea11a812000d3a3b70c9-d3b1f5fdf153475aa1e698a39640f95b&esid=8767241f-2213-eb11-a813-000d3a3abdcf

As of July 2022, COVID-19 vaccines are safe and effective at reducing the risk of acquiring and transmitting the virus for the population six months and older.¹⁰ However, there are some who still choose not to receive the COVID-19 vaccine.

Participants who had *not* been vaccinated (both those planning and not planning to get vaccinated) were then asked, “What is/are the main reason(s) you have not taken the vaccine?” and were then encouraged to select all that apply, including an “other, please specify” option. This question included many statistically unstable estimates. Thus, only responses that had no more than one unstable estimate across all racial/ethnic groups were included in the figure below. As illustrated here, there was a significantly higher percentage of White residents (43.8%) who do not trust the government than there was for Hispanic/Latinx residents (26.6%).

Figure 23. Reasons for Not Getting the Vaccine – Residents Who Are Unvaccinated



Note: Hispanic/Latinx *n* = 139,985, White *n* = 74,002, Asian American/Asian *n* = 6,954, African American/Black *n* = 13,884, and “Other” *n* = 14,324.

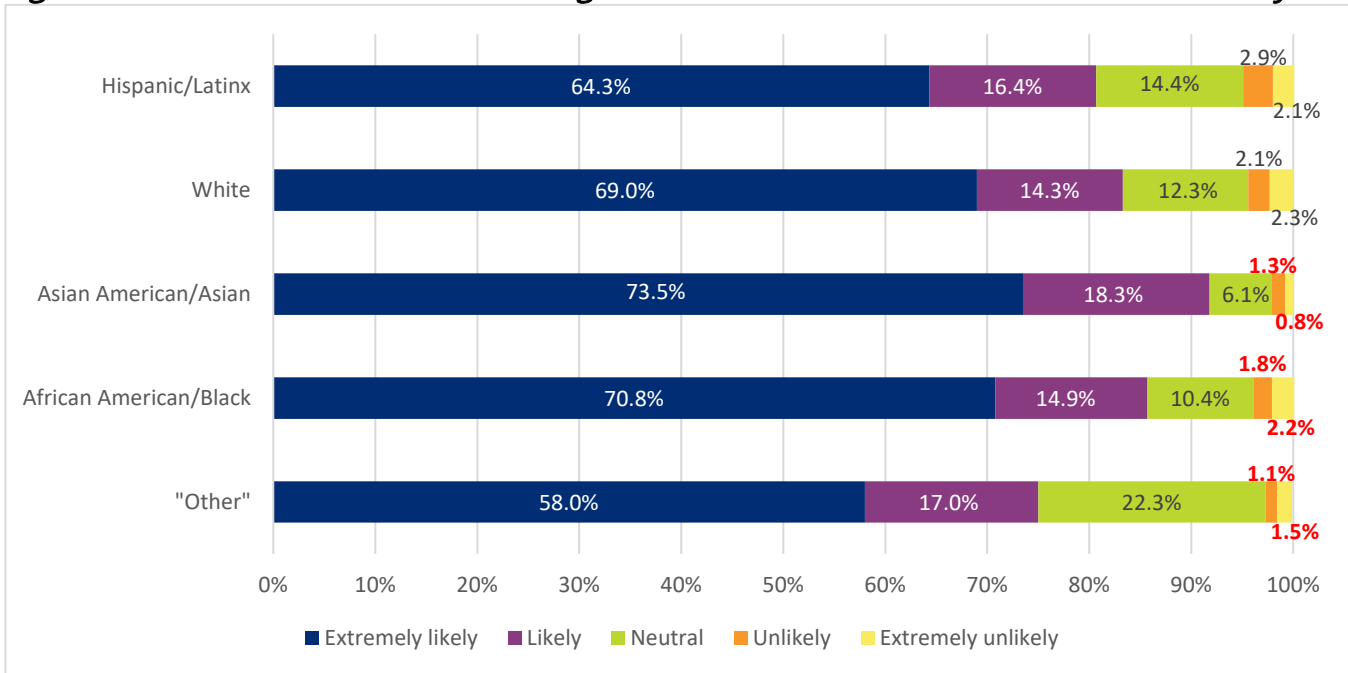
¹⁰ Benefits of Getting a COVID-19 Vaccine (2021). Centers for Disease Control and Prevention. <https://www.cdc.gov/coronavirus/2019-ncov/vaccines/vaccine-benefits.html>

COVID-19 Vaccine for Children and Teens (2022). Centers for Disease Control and Prevent. <https://www.cdc.gov/coronavirus/2019-ncov/vaccines/recommendations/children-teens.html>

Likelihood of Recommending the COVID-19 Vaccine

Residents who were vaccinated were asked, “How likely are you to recommend the vaccine to someone else?” Asian American/Asian (73.5%) and White residents (69.0%) were significantly more likely to be “extremely likely” to recommend the vaccine than were Hispanic/Latinx (64.3%) and “other” residents (58.0%). Further, African American/Black residents (70.8%) were significantly more likely to be “extremely likely” to recommend the vaccine than were “other” residents (58.0%).

Figure 24. Likelihood of Recommending Vaccine to Others – Vaccinated Residents Only



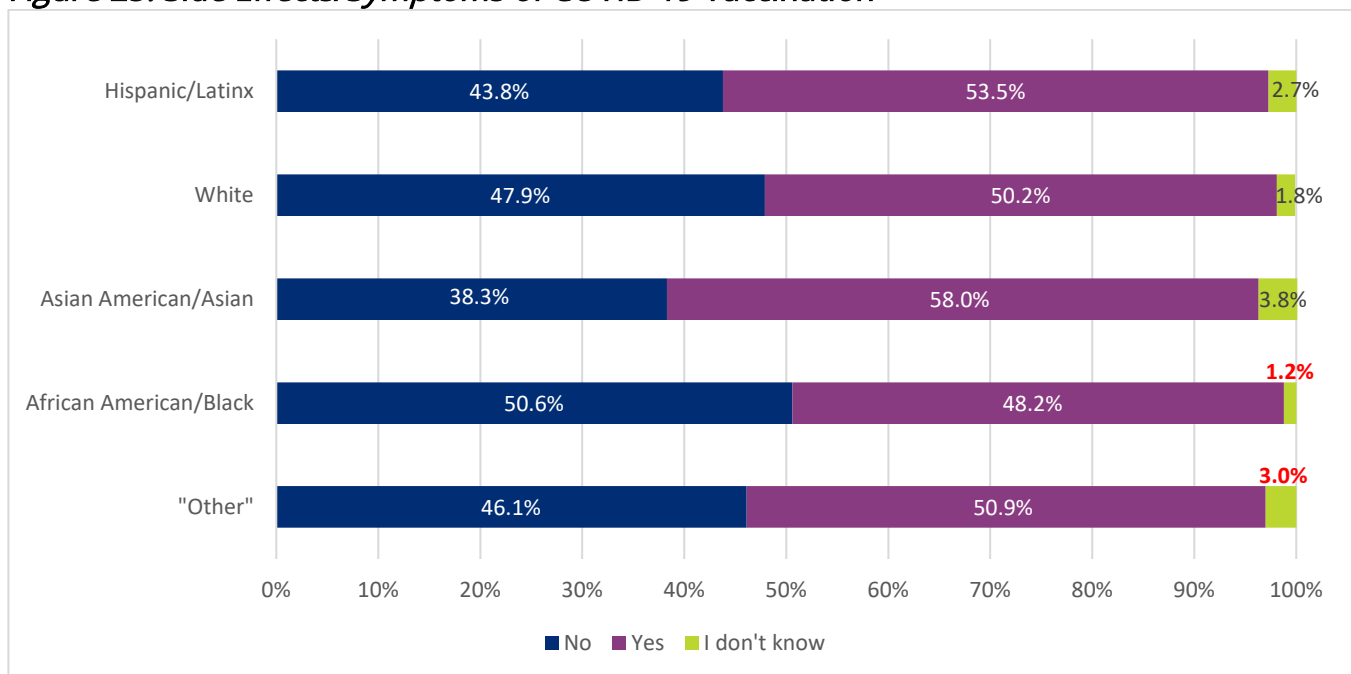
Note: Hispanic/Latinx *n* = 669,115, White *n* = 575,111, Asian American/Asian *n* = 123,870, African American/Black *n* = 94,146, and “Other” *n* = 60,786.

COVID-19 Vaccine Side Effects

Some people experienced side effects from the COVID-19 vaccines, which are common indications that the vaccine is developing protection.¹¹ Common side-effects of COVID-19 vaccination include tiredness, headaches, muscle pain, chills, fever, and nausea, in addition to pain, redness, and swelling of the arm.¹² Residents who were vaccinated were asked, “Did you have any side effects or symptoms after receiving the COVID-19 vaccination?”

African American/Black (50.6%) and White residents (47.9%) were significantly more likely to report no side effects than were Asian American/Asian residents (38.3%).

Figure 25. Side Effects/Symptoms of COVID-19 Vaccination



Note: Hispanic/Latinx $n = 667,178$, White $n = 574,078$, Asian American/Asian $n = 123,980$, African American/Black $n = 95,449$, and “Other” $n = 61,021$.

¹¹ Possible Side Effects After Getting a COVID-19 Vaccine (2021). Centers for Disease Control and Prevention. <https://www.cdc.gov/coronavirus/2019-ncov/vaccines/expect/after.html>

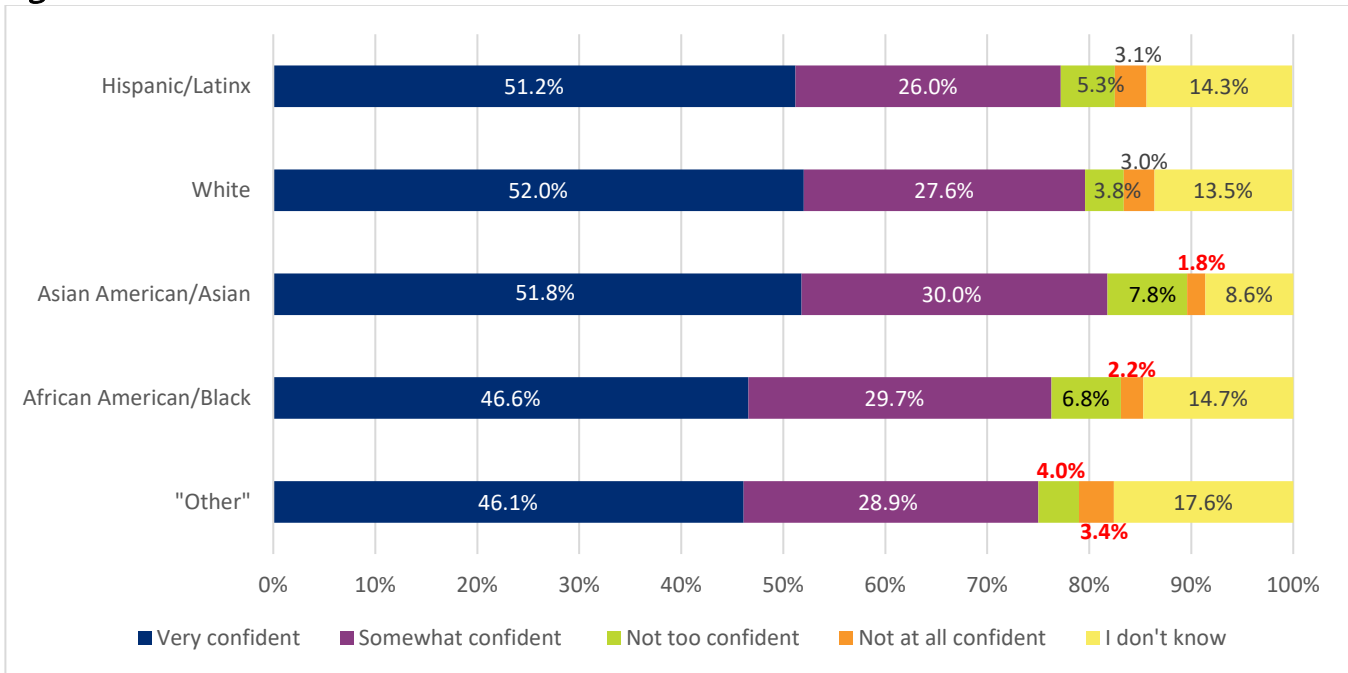
¹² Possible Side Effects After Getting a COVID-19 Vaccine (2021). Centers for Disease Control and Prevention. <https://www.cdc.gov/coronavirus/2019-ncov/vaccines/expect/after.html>

Equity in COVID-19 Vaccine Distribution

Certain factors such as income, education, economic status, healthcare access, racism/discrimination, and transportation/neighborhood conditions can contribute to disparities in access to COVID-19 vaccines.¹³

To assess perceptions of vaccine equity, residents were asked, “How confident are you that the COVID-19 vaccine is being distributed fairly?” As illustrated below, Asian American/Asian residents (7.8%) were significantly more likely to respond “not too confident” than were White residents (3.8%). “Other” (17.6%) and Hispanic/Latinx residents (14.3%) were significantly more likely to respond “I don’t know” than were Asian American/Asian residents (8.6%).

Figure 26. Confidence in Fair Distribution of COVID-19 Vaccine



Note: Hispanic/Latinx $n = 818,623$, White $n = 655,365$, Asian American/Asian $n = 132,720$, African American/Black $n = 110,627$, and “Other” $n = 76,322$.

¹³ COVID-19 Vaccine Equity for Racial and Ethnic Minority Groups (2021).Centers for Disease Control and Prevention. <https://www.cdc.gov/coronavirus/2019-ncov/community/health-equity/vaccine-equity.html>

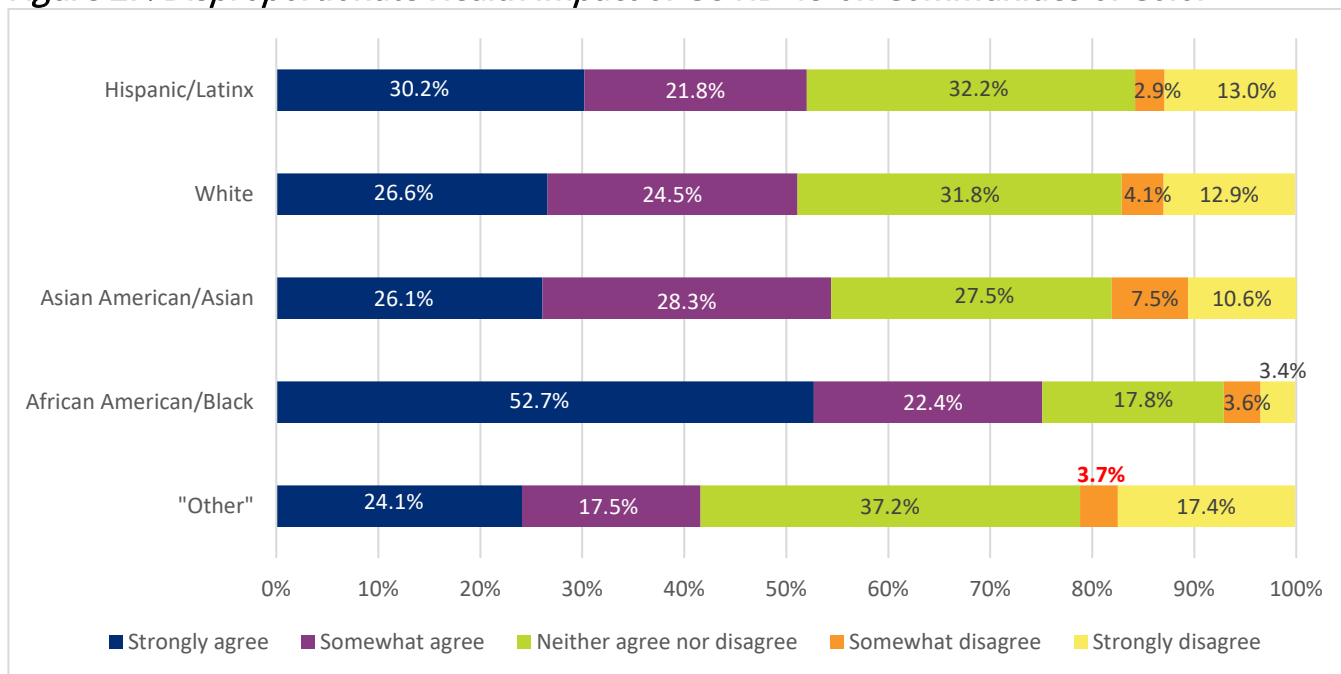
Disproportionate Impact of COVID-19 on Communities of Color

The COVID-19 pandemic exacerbated a variety of health, social, and economic problems. Among these areas, health inequities arose among communities of color since these communities were disproportionately at risk of becoming ill or dying from COVID-19.¹⁴

To understand perceptions of these health inequities, residents were provided with statements to rate their agreement/disagreement. First, residents were asked about health impacts, then about economic impacts.

Specifically, residents rated the statement, “People of color (e.g., African Americans, Latinos) are facing more of the health impact of coronavirus (COVID-19) than Whites.” African American/Black residents (52.7%) were significantly more likely to “strongly agree” than were residents of all other racial/ethnic groups. Further, Asian American/Asian residents (7.5%) were significantly more likely to “somewhat disagree” than were White (4.1%) and Hispanic/Latinx residents (2.9%). Further, African American/Black residents (17.8%) were significantly less likely to “neither agree nor disagree” than were all other race/ethnicities.

Figure 27. Disproportionate Health Impact of COVID-19 on Communities of Color

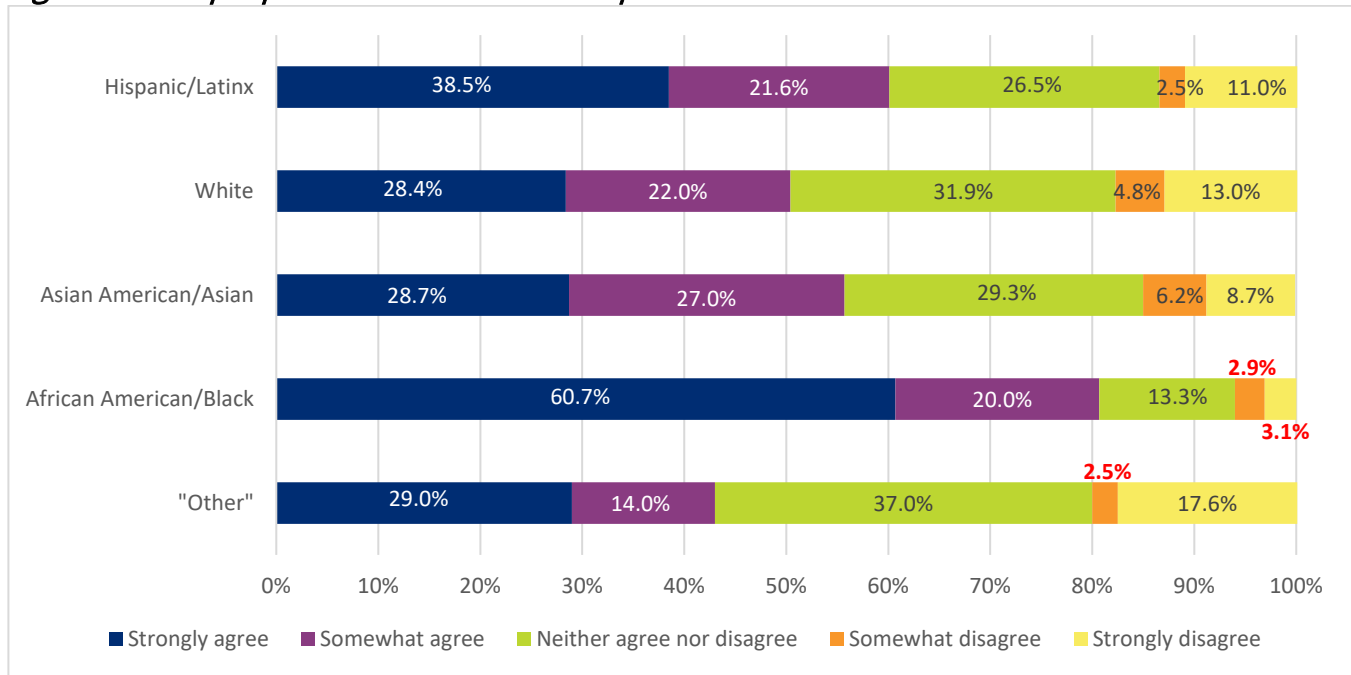


Note: Hispanic/Latinx $n = 816,304$, White $n = 654,851$, Asian American/Asian $n = 132,808$, African American/Black $n = 111,813$, and “Other” $n = 76,565$.

¹⁴ Health Equity Considerations and Racial and Ethnic Minority Groups (2021). Centers for Disease Control and Prevention. <https://www.cdc.gov/coronavirus/2019-ncov/community/health-equity/race-ethnicity.html>

Residents also rated the statement, “People of color (e.g., African Americans, Latinos) are facing more of the financial/economic impact of coronavirus (COVID-19) than Whites.” African American/Black residents (60.7%) were significantly more likely to “strongly agree” than were residents of all other racial/ethnic groups. Further, White residents (31.9%) were significantly more likely to “neither agree nor disagree” than were Hispanic/Latinx (26.5%) and African American/Black residents (13.3%).

Figure 28. Disproportionate Economic Impact of COVID-19 on Communities of Color



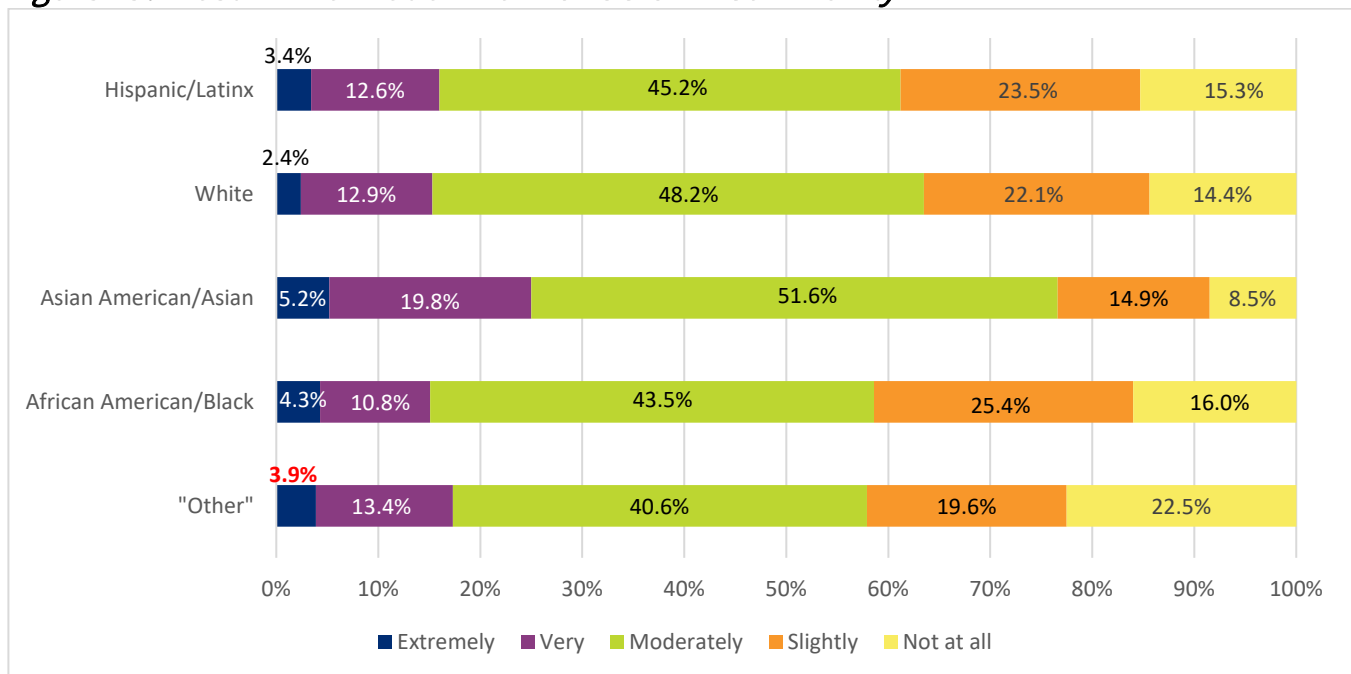
Note: Hispanic/Latinx $n = 814,550$, White $n = 655,119$, Asian American/Asian $n = 132,569$, African American/Black $n = 111,825$, and “Other” $n = 76,295$.

COVID-19 Information Seeking

Residents were asked, “How well do you trust information from members of your own community?”

Results show that “other” residents (22.5%) were significantly more likely to respond “not at all” than were Hispanic/Latinx (15.3%), White (14.4%), and Asian American/Asian residents (8.5%). In addition, Asian American/Asian residents (19.8%) were significantly more likely to respond “very” than were White (12.9%), Hispanic/Latinx (12.6%), and African American/Black residents (10.8%).

Figure 29. Trust in Information from One's Own Community



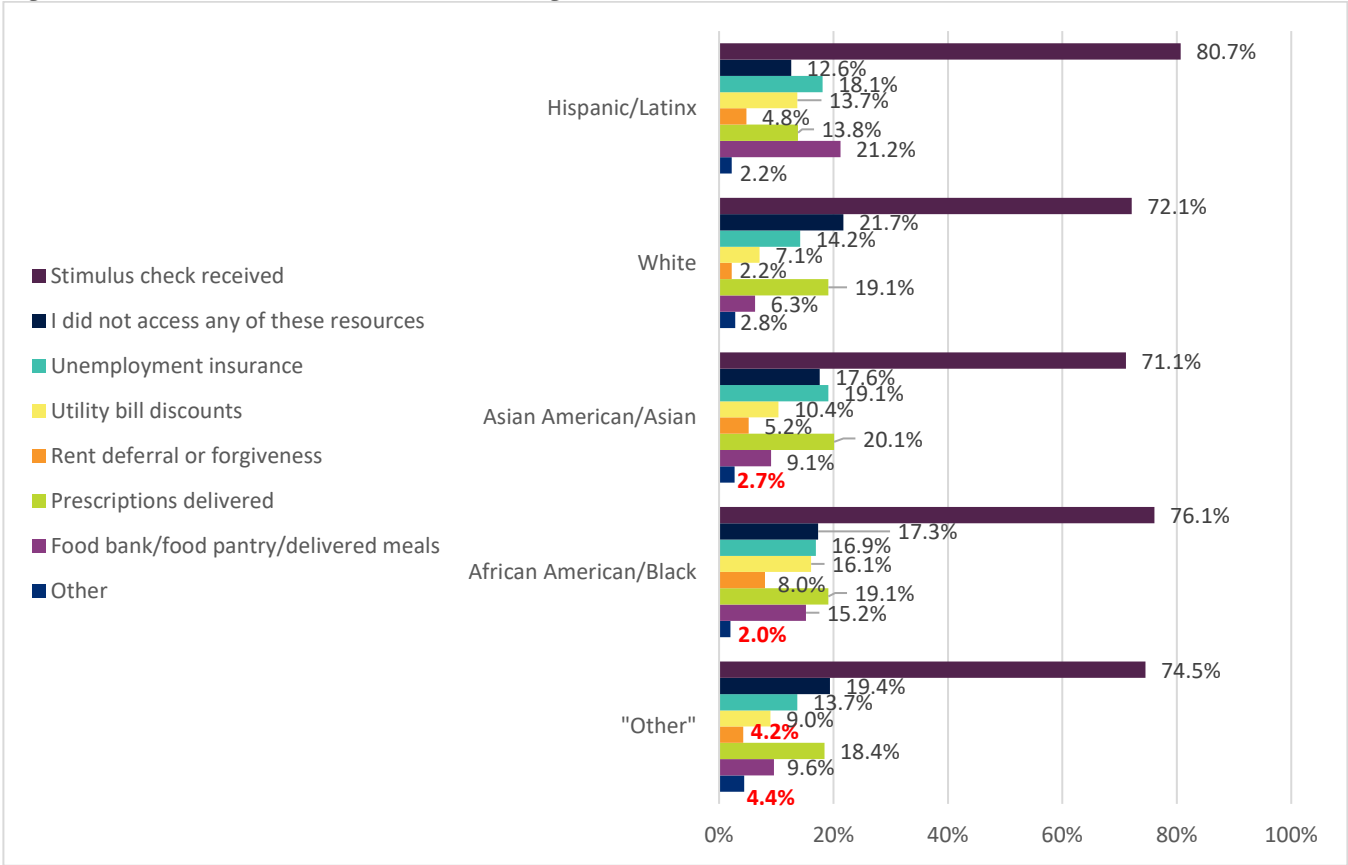
Note: Hispanic/Latinx $n = 821,013$, White $n = 656,466$, Asian American/Asian $n = 133,001$, African American/Black $n = 112,327$, and “Other” $n = 76,258$.

COVID-19 Resources Accessed

Residents were also asked, "Have you accessed any of these resources during the pandemic?" and were encouraged to select all that apply. Across all racial/ethnic groups, over 70.0% of residents accessed stimulus checks.

African American/Black and Hispanic/Latinx residents were significantly more likely to report receiving utility bill discounts (16.1% and 13.7%, respectively), rent deferral or forgiveness (8.0% and 4.8%, respectively), and food bank/food pantry/delivered meals (15.2% and 21.2% respectively) than were White residents (7.1%, 2.2%, 6.3%, respectively). In addition, Asian American/Asian (20.1%) and White residents (19.1%) were significantly more likely to access delivered prescriptions than were Hispanic/Latinx residents (13.8%).

Figure 30. Resources Accessed During the Pandemic



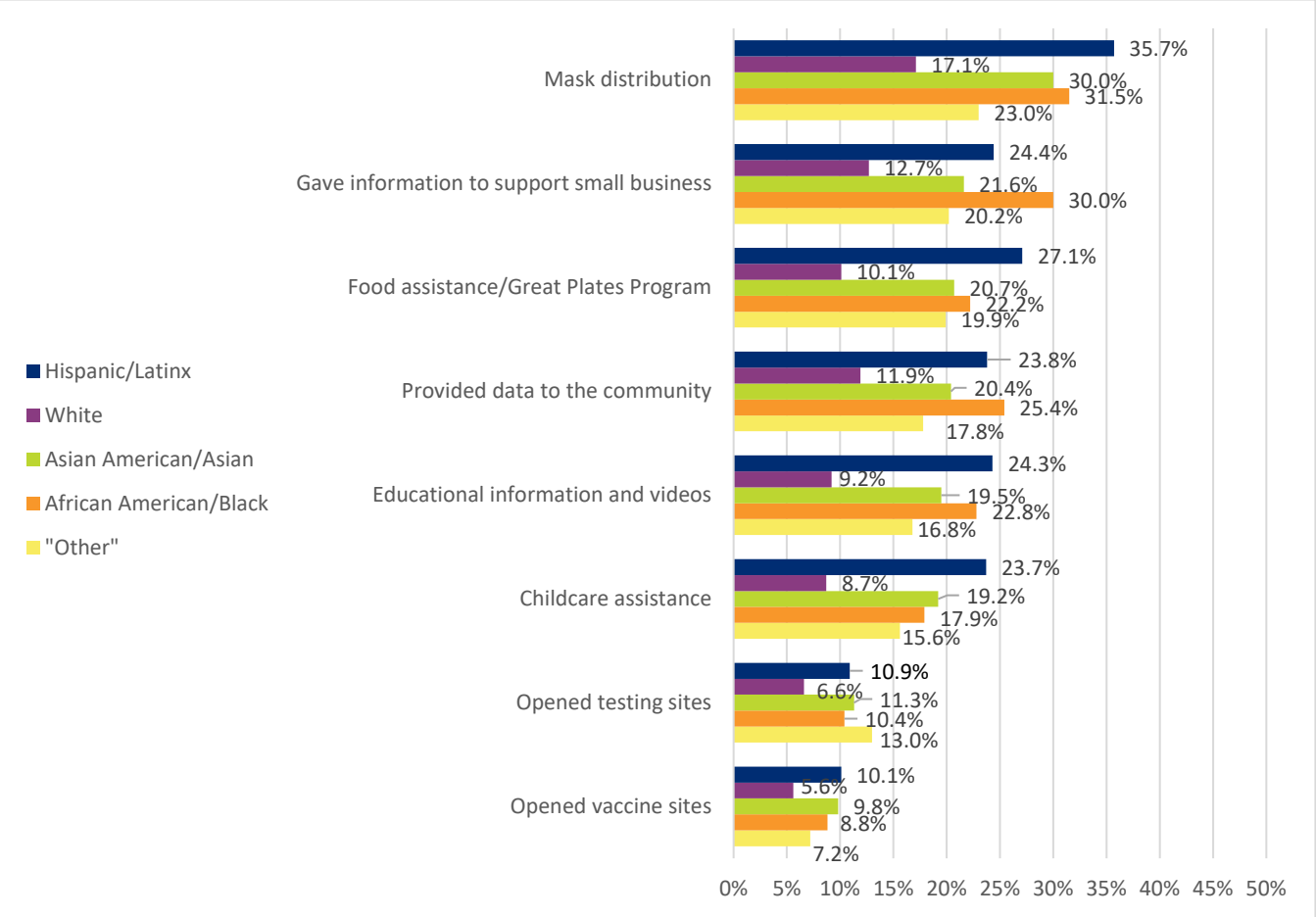
Note: Hispanic/Latinx *n* = 802,137, White *n* = 642,279, Asian American/Asian *n* = 128,922, African American/Black *n* = 109,350, and "Other" *n* = 74,560.

Knowledge of Public Health Efforts During COVID-19

RUHS - Public Health has worked relentlessly to mitigate the effects of COVID-19 in our communities. To evaluate efforts and understand local perceptions, residents were given the following prompt, "The Department of Public Health within Riverside County had worked to reduce the impact of COVID-19 throughout the community," and could then rate their knowledge of each activity: "knew about it," "knew about it and used it," "unaware and didn't need it," and "unaware and would have liked to know about this." For clarity, only the option of "unaware and would have liked to know about this" is illustrated in the figure below. All responses are provided in a table, following the figure.

Several significant differences were present. A significantly higher percentage of Hispanic/Latinx residents (35.7%) were unaware and would have liked to have known about mask distribution compared to "other" (23.0%) and White residents (17.1%). In addition, a significantly higher percentage of Hispanic/Latinx, Asian American/Asian, African American/Black, and "other" residents were unaware and would have liked to have known about food assistance/Great Plates Program, childcare assistance, educational information and videos, and the giving of information to support small businesses, compared to White residents.

Figure 31. Knowledge of Public Health Efforts During COVID-19



Note: See the "Note" under Table 3 for the sample size of each racial group from this figure.

Table 3. Knowledge of Public Health Efforts During COVID-19

Category	Response	Hispanic/ Latinx	White	Asian American/ Asian	African American/ Black	“Other”
Opened vaccine sites	Unaware and would have liked to know about this	10.1%	5.6%	9.8%	8.8%	7.2%
	Unaware and didn't need it	10.3%	13.4%	11.0%	12.2%	14.5%
	Knew and used it	32.1%	35.5%	36.9%	26.6%	29.5%
	Knew about it	47.5%	45.4%	42.3%	52.5%	48.7%
Opened testing sites	Unaware and would have liked to know about this	10.9%	6.6%	11.3%	10.4%	8.8%
	Unaware and didn't need it	9.7%	14.5%	13.0%	11.0%	13.0%
	Knew and used it	28.8%	26.7%	29.4%	24.6%	27.0%
	Knew about it	50.6%	52.1%	46.2%	54.0%	51.1%
Childcare assistance	Unaware and would have liked to know about this	23.7%	8.7%	19.2%	17.9%	15.6%
	Unaware and didn't need it	57.6%	73.6%	66.4%	64.4%	63.4%
	Knew and used it	1.8%	0.6%	1.7%	1.9%	0.9%
	Knew about it	16.9%	17.0%	12.7%	15.8%	20.0%
Educational information and videos	Unaware and would have liked to know about this	24.3%	9.2%	19.5%	22.8%	16.8%
	Unaware and didn't need it	42.3%	59.0%	47.8%	49.3%	46.3%
	Knew and used it	8.9%	5.8%	9.6%	4.3%	9.2%
	Knew about it	24.6%	26.0%	23.1%	23.6%	27.8%

Category	Response	Hispanic/ Latinx	White	Asian American/ Asian	African American/ Black	"Other"
Provided data to the community	Unaware and would have liked to know about this	23.8%	11.9%	20.4%	25.4%	17.8%
	Unaware and didn't need it	26.9%	28.2%	28.5%	26.5%	30.5%
	Knew and used it	13.7%	20.9%	18.1%	12.0%	15.7%
	Knew about it	35.6%	38.9%	33.0%	36.1%	36.0%
Food assistance/ Great Plates Program	Unaware and would have liked to know about this	27.1%	10.1%	20.7%	22.2%	19.9%
	Unaware and didn't need it	37.6%	56.2%	51.4%	41.6%	48.7%
	Knew and used it	6.5%	2.9%	4.0%	5.8%	7.2%
	Knew about it	28.8%	30.8%	23.9%	30.4%	24.2%
Gave information to support small business	Unaware and would have liked to know about this	24.4%	12.7%	21.6%	30.0%	20.2%
	Unaware and didn't need it	42.5%	54.7%	48.4%	43.6%	47.1%
	Knew and used it	5.9%	5.2%	6.4%	2.6%	7.9%
	Knew about it	27.2%	27.4%	23.6%	23.8%	24.8%
Mask distribution	Unaware and would have liked to know about this	35.7%	17.1%	30.0%	31.5%	23.0%
	Unaware and didn't need it	32.4%	55.1%	40.8%	36.4%	45.0%
	Knew and used it	8.9%	5.0%	9.9%	8.2%	7.6%
	Knew about it	23.1%	22.8%	19.4%	23.8%	24.4%

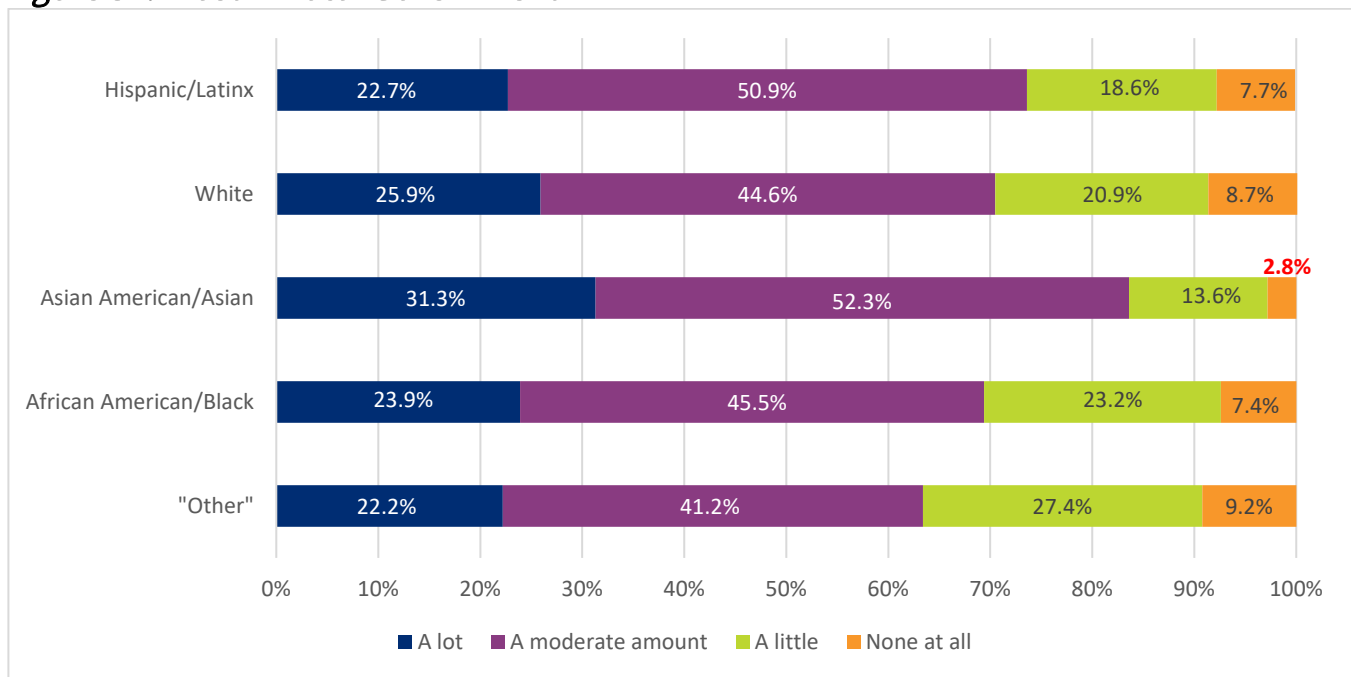
Note: Mask distribution: Hispanic/Latinx $n = 808,080$, White $n = 644,274$, Asian American/Asian $n = 130,864$, African American/Black $n = 109,836$, and "Other" $n = 76,508$. Gave information to support small business: Hispanic/Latinx $n = 788,960$, White $n = 630,903$, Asian American/Asian $n = 129,216$, African American/Black $n = 107,063$, and "Other" $n = 75,695$. Food assistance/Great Plates Program: Hispanic/Latinx $n = 796,533$, White $n = 639,507$, Asian American/Asian $n = 130,264$, African American/Black $n = 108,466$, and "Other" $n = 76,238$. Provided data to the community: Hispanic/Latinx $n = 787,449$, White $n = 631,685$, Asian American/Asian $n = 129,064$, African American/Black $n = 106,803$, and "Other" $n = 75,362$. Educational information and videos: Hispanic/Latinx $n = 781,562$, White $n = 630,048$, Asian American/Asian $n = 129,461$, African American/Black $n = 105,774$, and "Other" $n = 74,878$. Childcare assistance: Hispanic/Latinx $n = 783,589$, White $n = 630,383$, Asian American/Asian $n = 129,035$, African American/Black $n = 105,556$, and "Other" $n = 75,487$. Opened testing site: Hispanic/Latinx $n = 798,903$, White $n = 637,560$, Asian American/Asian $n = 130,399$, African American/Black $n = 107,583$, and "Other" $n = 75,910$. Opened vaccine sites: Hispanic/Latinx $n = 803,508$, White $n = 641,503$, Asian American/Asian $n = 130,953$, African American/Black $n = 107,627$, and "Other" $n = 75,860$.

Trust in Local Government

Given that RUHS – Public Health is a vital entity for helping the community thrive and recover from COVID-19, residents were asked, “How much do you trust local government such as County Public Health departments?”

There were several statistically significant results. “Other” (27.4%), African American/Black (23.2%), and White (20.9%) residents were significantly more likely to report trusting local government “a little” than were Asian American/Asian residents (13.6%). Additionally, Hispanic/Latinx residents (50.9%) were significantly more likely to report trusting local government “a moderate amount” than were White residents (44.6%), and Asian American/Asian residents (31.3%) were significantly more likely to report trusting local government “a lot” than were Hispanic/Latinx residents (22.7%).

Figure 32. Trust in Local Government



Note: Hispanic/Latinx $n = 817,133$, White $n = 653,335$, Asian American/Asian $n = 132,807$, African American/Black $n = 111,979$, and “Other” $n = 76,578$.

CONCLUSION

The purpose of this report has been to provide the results of a county-wide needs assessment by racial/ethnic group. The information provided here can help to inform outreach and education and to prioritize the investment of public resources in regard to COVID-19 mitigation and possible future outbreaks of yet unknown diseases.

As these results show, residents have been socially impacted by COVID-19 across racial/ethnic groups, but disparities nonetheless arise. For example, residents from each group reported great impacts on work/school participation and social life or relationships. However, communities of color were significantly more likely to experience great impacts on their economic situation, mental health, physical health, and work/school participation compared to White residents.

Disparities also arise in COVID-19 diagnosis and vaccination. Reflecting national trends, Hispanic/Latinx residents (69.2%) were significantly more likely to report having tested positive for COVID-19 than were all other racial/ethnic groups. In addition, Asian American/Asian residents (93.6%) were significantly more likely to be fully vaccinated than were all other racial/ethnic groups, followed by White residents (86.5%). For the reasons why someone was not vaccinated, there was a significantly higher percentage of White residents (43.8%) who said they do not trust the government compared to Hispanic/Latinx residents (26.6%).

Attitudes toward information seeking also differed. Asian American/Asian residents (19.8%) were significantly more likely to respond that they trust their community members “very,” compared to White (12.9%), Hispanic/Latinx (12.6%), and African American/Black residents (10.8%).

There were also disparities found in access and knowledge of resources. Hispanic/Latinx and African American/Black residents were significantly more likely to report receiving utility bill discounts, rent deferral or forgiveness, and food bank/food pantry/delivered meals than were White residents. A significantly higher percentage of Hispanic/Latinx residents (35.7%) were unaware and would have liked to have known about mask distribution compared to “other” (23.0%) and White residents (17.1%). In addition, a significantly higher percentage of Hispanic/Latinx, Asian American/Asian, African American/Black, and “other” residents were unaware and would have liked to have known about county resources (food assistance, childcare, educational materials, and small business support), compared to White residents.

The picture painted by this report is a familiar one of disproportionate health and social impacts on communities of color. The report provides clear evidence of a strong need for public outreach in Hispanic/Latinx, Asian American/Asian, African American/Black, and “other” communities of color.

However, while non-White residents often were significantly more likely to report great impacts, some non-White groups had disproportionate positive outcomes. For example, Asian American/Asian residents had the highest vaccination rate (93.6%) among all groups and were more likely to trust their community members “very” than were White, Hispanic/Latinx, and African American/Black residents.

One possible explanation for these types of outcomes is socio-economic class. Among the general U.S. population, Asian American/Asian residents are more likely to have higher educational attainment and income than other racial/ethnic groups.¹⁵ This explanation would fit other evidence: in other contexts, class has proven to be a key driver of COVID-19 outcomes.¹⁶ However, it should be noted that in Riverside County, a significantly higher percentage of those living above 300% of the poverty level were found among White residents than were among Asian American/Asian residents. Further analyses would be necessary to determine the relationship between race/ethnicity and socio-economic class in Riverside County.

Two conclusions emerge: there is a pressing need for public outreach to communities of color, and there is likewise a need to further study the role of socio-economic class in COVID-19 outcomes in the county.

¹⁵ Such class differences lessen or disappear when poverty level and wealth (rather than income) are considered. See “For Asian Americans, Wealth Stereotypes Don’t Fit Reality” (17 March 2015). NBC News. <https://www.nbcnews.com/feature/in-plain-sight/asian-american-social-class-more-complicated-data-n316616>

¹⁶ See Gopal, A. and Sreedar, A. (3 Dec 2021). “Behind Low Vaccination Rates Lurks a More Profound Social Weakness.” *The New York Times*. <https://www.nytimes.com/2021/12/03/opinion/vaccine-hesitancy-covid.html>